

=> file reg

FILE 'REGISTRY' ENTERED AT 15:02:00 ON 28 JAN 2003
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STRUCTURE FILE UPDATES: 27 JAN 2003 HIGHEST RN 482277-90-7
DICTIONARY FILE UPDATES: 27 JAN 2003 HIGHEST RN 482277-90-7

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP
PROPERTIES for more information. See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> d his

(FILE 'HOME' ENTERED AT 14:44:36 ON 28 JAN 2003)

FILE 'REGISTRY' ENTERED AT 14:46:39 ON 28 JAN 2003

DELETE BOYER/L
ACTIVATE BOYER295/A

L1 SCR 1918
L2 SCR 1602
L3 SCR 2090
L4 SCR 1700 OR 1707
L5 STR
L6 SCR 963 OR 1398
L7 SCR 1841
L8 14326 SEA FILE=REGISTRY SSS FUL L5 AND L2 AND L3 AND L4 AND L6 NOT (L

ACTIVATE BOYERA/A

L9 SCR 1918
L10 SCR 1602
L11 SCR 2090
L12 SCR 1700 OR 1707
L13 STR
L14 SCR 963 OR 1398
L15 SCR 1841
L16 (14326) SEA FILE=REGISTRY SSS FUL L13 AND L10 AND L11 AND L12 AND L14 N
L17 STR
L18 1081 SEA FILE=REGISTRY SUB=L16 SSS FUL L17

ACTIVATE BOYERB/A

L19 SCR 1918
L20 SCR 1602
L21 SCR 2090
L22 SCR 1700 OR 1707

L23 STR
L24 SCR 963 OR 1398
L25 SCR 1841
L26 (14326) SEA FILE=REGISTRY SSS FUL L23 AND L20 AND L21 AND L22 AND L24 N
L27 STR
L28 873 SEA FILE=REGISTRY SUB=L26 SSS FUL L27

FILE 'HCA' ENTERED AT 14:47:48 ON 28 JAN 2003
L29 858 S L18
L30 843 S L28
L31 1666 S L29 OR L30
L32 329730 S SOAP? OR SHAMPOO? OR DETERGEN? OR CLEAN? OR DISHWASH? OR LAUN
L33 35 S L29 AND L32
L34 125 S L30 AND L32

FILE 'LCA' ENTERED AT 14:49:53 ON 28 JAN 2003

FILE 'HCA' ENTERED AT 14:53:17 ON 28 JAN 2003
L35 85961 S 46/SX, SC
L36 102307 S 62/SX, SC
L37 16 S L33 AND L35
L38 69 S L34 AND L35
L39 6 S L33 AND L36
L40 32 S L34 AND L36
L41 20 S L37 OR L39
L42 92 S L38 OR L40

FILE 'REGISTRY' ENTERED AT 14:55:22 ON 28 JAN 2003
L43 288 S L18 AND 2-4/NC
L44 355 S L18 AND 1-4/NC
L45 789 S L28 AND 1-3/NC
L46 755 S L28 AND 1-2/NC

FILE 'HCA' ENTERED AT 14:58:36 ON 28 JAN 2003
L47 359 S L43
L48 776 S L46
L49 122 S L48 AND L32
L50 66 S L49 AND L35
L51 85 S L48 AND L36
L52 4 S L39 NOT L37
L53 68 S L38 NOT (L37 OR L39)
L54 23 S L40 NOT (L38 OR L37 OR L39)

FILE 'LCA' ENTERED AT 15:01:21 ON 28 JAN 2003

FILE 'REGISTRY' ENTERED AT 15:02:00 ON 28 JAN 2003

=> d que stat L18

L9 SCR 1918
L10 SCR 1602
L11 SCR 2090
L12 SCR 1700 OR 1707
L13 STR

8
Ak

O~CH2~CH2~N~CH2~CH2~O
1 2 3 4 5 6 7

parent.

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

GGCAT IS LIN LOC SAT AT 8

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 8

STEREO ATTRIBUTES: NONE

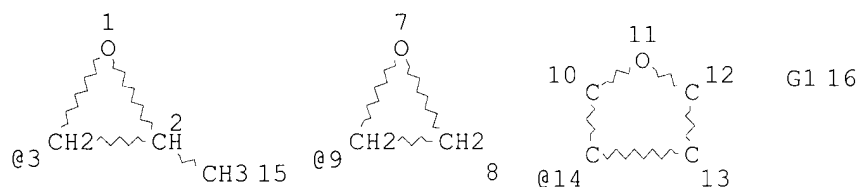
L14 SCR 963 OR 1398

L15 SCR 1841

L16 (14326)SEA FILE=REGISTRY SSS FUL L13 AND L10 AND L11 AND L12 AND L14

NOT (L9 OR L15)

L17 STR



← subset
1
monomers

VAR G1=3/9/14

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE

L18 1081 SEA FILE=REGISTRY SUB=L16 SSS FUL L17

100.0% PROCESSED 1460 ITERATIONS

1081 ANSWERS

SEARCH TIME: 00.00.01

=> d que stat L28

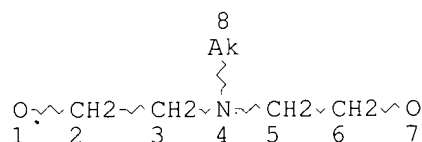
L19 SCR 1918

L20 SCR 1602

L21 SCR 2090

L22 SCR 1700 OR 1707

L23 STR



NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

GGCAT IS LIN LOC SAT AT 8

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 8

STEREO ATTRIBUTES: NONE

L24 SCR 963 OR 1398

L25 SCR 1841

L26 (14326)SEA FILE=REGISTRY SSS FUL L23 AND L20 AND L21 AND L22 AND L24
NOT (L19 OR L25)

L27 STR

8
Ak
}

HO~G1~CH2~CH2~N~CH2~CH2~G2~OH
11 1 2 3 4 5 6 7 12

Ak~O
@9 @10

REP G1=(1-10) 10-2 9-11

REP G2=(1-10) 10-6 9-12

NODE ATTRIBUTES:

CONNECT IS E2 RC AT 9

CONNECT IS E2 RC AT 10

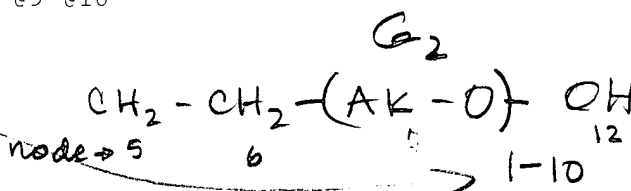
DEFAULT MLEVEL IS ATOM

GGCAT IS LIN LOC SAT AT 8

GGCAT IS SAT AT 9

DEFAULT ECLEVEL IS LIMITED

ECOUNT IS M2-X4 C AT 9



GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE

L28 873 SEA FILE=REGISTRY SUB=L26 SSS FUL L27

100.0% PROCESSED 12722 ITERATIONS

873 ANSWERS

SEARCH TIME: 00.00.01

=> file hca

FILE 'HCA' ENTERED AT 15:02:59 ON 28 JAN 2003

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FILE COVERS 1907 - 23 Jan 2003 VOL 138 ISS 5

FILE LAST UPDATED: 23 Jan 2003 (20030123/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d L37 1-5 cbib abs hitind hitstr

L37 ANSWER 1 OF 16 HCA COPYRIGHT 2003 ACS

134:18797 Car wash **cleaner** containing ethylene oxide-propylene oxide copolymers. Rudin, Richard E.; Lohr, Robert H. (S.C. Johnson & Son, Inc., USA). PCT Int. Appl. WO 2000071655 A1 20001130, 14 pp. DESIGNATED STATES: W: BR, CA, JP, MX, ZA; RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE. (English). CODEN: PIXXD2. APPLICATION: WO 2000-US13925 20000519. PRIORITY: US 1999-317508 19990524.

AB Title **detergent** contains ethylene oxide-propylene oxide block copolymers, anionic surfactants, and water. The **cleaning** compn. **cleans** vehicles without requiring hand drying of the vehicle to avoid spotting and without adversely affecting beading properties.

IC ICM C11D001-83

ICS C11D003-37; C11D001-722; C11D003-20; C11D001-44

CC **46-6** (Surface Active Agents and Detergents)

ST ethylene propylene oxide block copolymer automobile **detergent**

IT Surfactants

(anionic; car wash **cleaner** contg. ethylene oxide-propylene oxide copolymers)

IT Polyoxyalkylenes, uses

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(block; car wash **cleaner** contg. ethylene oxide-propylene oxide copolymers)

IT Automobiles

Detergents

(car wash **cleaner** contg. ethylene oxide-propylene oxide copolymers)

IT 106392-12-5, Pluronic N 3 **107397-59-1**, Tetronic 150R-1

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(car wash **cleaner** contg. ethylene oxide-propylene oxide copolymers)

IT 50-00-0, Formaldehyde, uses 9004-82-4, Sodium laureth sulfate

25155-30-0, Sodium dodecylbenzenesulfonate

RL: TEM (Technical or engineered material use); USES (Uses)

(car wash **cleaner** contg. ethylene oxide-propylene oxide copolymers)

IT **107397-59-1**, Tetronic 150R-1

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(car wash **cleaner** contg. ethylene oxide-propylene oxide copolymers)

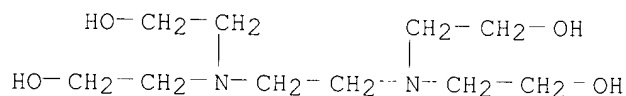
RN 107397-59-1 HCA

CN Oxirane, methyl-, polymer with oxirane, ether with 2,2',2'',2'''-(1,2-ethanediyldinitrilo)tetrakis[ethanol] (4:1), block (9CI) (CA INDEX NAME)

CM 1

CRN 140-07-8

CMF C10 H24 N2 O4

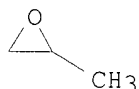


CM 2

CRN 106392-12-5
 CMF (C3 H6 O . C2 H4 O)x
 CCI PMS

CM 3

CRN 75-56-9
 CMF C3 H6 O



CM 4

CRN 75-21-8
 CMF C2 H4 O



L37 ANSWER 2 OF 16 HCA COPYRIGHT 2003 ACS

129:317980 Composition containing alkoxyated ester-amine and its preparation for fabric softening applications. Lenoir, Pierre; Delcour, Kees; Meertens, Marinus (The Dow Chemical Company, USA). PCT Int. Appl. WO 9845394 A2 19981015, 35 pp. DESIGNATED STATES: W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 1998-US6323 19980331.

AB A compn. contg. 1 of the alkoxyated ester-amine (I) R1R2R3N, protonated form (II) R1R2R3N(HA)y or quaternized form (III) R1R2R3N(QA)y or a mixt. of .gtoreq.2 of these compns. [R1 = R6(OCHR5CH2)aOCHR4CH2; or CnH(2n+1-x)(OR8)x; R2 and R3 = C1-4-alkyl; or R6(OCHR5CH2)aOCHR4CH2; or CnH(2n+1-x)(OR8)x; R4 = H or C1-4-alkyl; R5 = H or C1-4-alkyl, preferably .gtoreq.1 R5 = C1-4-alkyl; R6 = H or R7CO; R7 = C5-35, preferably C8-23, linear or branched-satd. or unsatd. alkyl; R8 = H or R7CO; or R6(OCHR5CH2)a; a = 0-30; n and x = 2-6; A = inorg. or org. acid anion; Q = C1-6-alkyl or C8-12 aryl, optionally substituted with an alkyl, or HOCHR9CH2 group, in which R9 = H or C1-4-alkyl; and 0<y (independently in each formula) 1; with the proviso that .gtoreq.1 R7CO group is present, .gtoreq.1 R6(OCHR5CH2)a group is present, and .gtoreq.1 a is not 0]; is used in a hydrolytically stable softener, **detergent**, **cleaner** or personal care formulation. Thus, a softener contained

perfume 6, citric acid 6, water 6, and butoxylated triethanolamine
 C16-18-alkyl fatty acid ester, Me chloride quat 82%.

IC ICM C11D003-00

CC **46-5** (Surface Active Agents and Detergents)

ST fabric softener alkoxyated ester amine; **laundry detergent** alkoxyated ester amine; hydrolysis stability fabric softener

IT **Detergents**
 (laundry; manuf. of alkoxyated ester-amine fabric softening agent for)

IT 214473-92-4DP, ester with C16-18-alkyl fatty acid 214491-85-7P
 214491-86-8P **214707-13-8P 214707-15-0P** 214837-74-8P
 214837-75-9DP, ester with C16-18-alkyl fatty acid
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (manuf. of alkoxyated ester-amine fabric softening agent)

IT **214707-13-8P 214707-15-0P**
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (manuf. of alkoxyated ester-amine fabric softening agent)

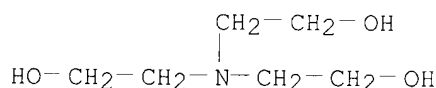
RN 214707-13-8 HCA

CN Oxirane, ethyl-, polymer with oxirane, ether with 2,2',2''-nitrilotris[ethanol] (3:1), dioctadecanoate (9CI) (CA INDEX NAME)

CM 1

CRN 102-71-6

CMF C6 H15 N O3



CM 2

CRN 57-11-4

CMF C18 H36 O2



CM 3

CRN 27517-34-6

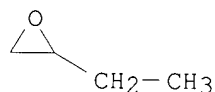
CMF (C4 H8 O . C2 H4 O)x

CCI PMS

CM 4

CRN 106-88-7

CMF C4 H8 O



CM 5

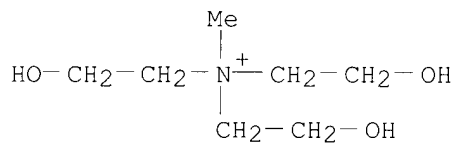
CRN 75-21-8
CMF C2 H4 O

RN 214707-15-0 HCA
CN Oxirane, ethyl-, polymer with oxirane, ether with 2-hydroxy-N,N-bis(2-hydroxyethyl)-N-methylethanaminium (3:1), dioctadecanoate, chloride (9CI)
(CA INDEX NAME)

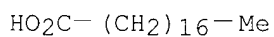
CM 1

CRN 214707-14-9
CMF C18 H36 O2 . 1/2 C7 H18 N O3 . 3/2 (C4 H8 O . C2 H4 O)x

CM 2

CRN 44971-58-6
CMF C7 H18 N O3

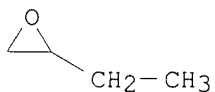
CM 3

CRN 57-11-4
CMF C18 H36 O2

CM 4

CRN 27517-34-6
CMF (C4 H8 O . C2 H4 O)x
CCI PMS

CM 5

CRN 106-88-7
CMF C4 H8 O

CM 6

CRN 75-21-8
CMF C2 H4 O



L37 ANSWER 3 OF 16 HCA COPYRIGHT 2003 ACS

129:304028 Composition useful for softening applications and processes for the preparation thereof. Delcour, Kees; Meertens, Marinus; Lenoir, Pierre (Dow Europe S. A., Switz.; Dow Benelux N. V.). Eur. Pat. Appl. EP 869114 A1 19981007, 23 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO. (English). CODEN: EPXXDW. APPLICATION: EP 1997-105620 19970404.

AB The title compns. comprise R1R2R3N (R1 is an oxyalkylene group R2 and R3 are independently C1-24 alkyl group or an oxyalkylene group) or protonated or quaternized forms thereof. The compn. can be used in paper and fabric softening products, softergent products, personal care, and lubricant products. A compn. was prepd. by propoxylating triethanolamine, esterifying with Radiacid 407, and quaternizing with MeCl.

IC ICM C07C219-06

ICS C07C213-06; C11D001-46; C11D001-62; D21H017-14; B01D019-04

CC **46-4** (Surface Active Agents and Detergents)

Section cross-reference(s): 40

IT **Detergents**

Fabric softeners

Lubricants

(compn. useful for softening applications and processes for the prepn. thereof)

IT 102-71-6DP, unsatd. fatty acid esters 13412-15-2P, Triethanolamine distearate 25322-69-4DP, ethers with triethanolamine fatty acid esters 37208-53-0P **37280-83-4DP**, unsatd. fatty acid esters **214425-34-0DP**, unsatd. fatty acid esters, Me chloride salts 214491-85-7P 214491-86-8P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(compn. useful for softening applications and processes for the prepn. thereof)

IT 74-87-3DP, Methyl chloride, salts with propoxylated triethanolamine fatty acid esters 37208-53-0DP, unsatd. fatty acid esters, hydrochloride salts **194303-54-3DP**, unsatd. fatty acid esters 214473-89-9DP, unsatd. fatty acid esters, Me chloride salts 214473-90-2DP, unsatd. fatty acid esters 214473-91-3DP, unsatd. fatty acid esters 214473-92-4DP, unsatd. fatty acid esters 214559-31-6P 214559-33-8P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(compn. useful for softening applications and processes for the prepn. thereof)

IT **37280-83-4DP**, unsatd. fatty acid esters **214425-34-0DP**, unsatd. fatty acid esters, Me chloride salts

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(compn. useful for softening applications and processes for the prepn. thereof)

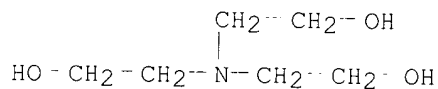
RN 37280-83-4 HCA

CN Oxirane, methyl-, polymer with oxirane, ether with 2,2',2''-nitrilotris[ethanol] (3:1) (9CI) (CA INDEX NAME)

CM 1

CRN 102-71-6

CMF C6 H15 N O3



CM 2

CRN 9003-11-6

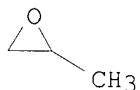
CMF (C3 H6 O . C2 H4 O) x

CCI PMS

CM 3

CRN 75-56-9

CMF C3 H6 O



CM 4

CRN 75-21-8

CMF C2 H4 O



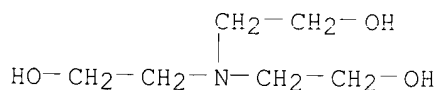
RN 214425-34-0 HCA

CN Oxirane, ethyl-, polymer with oxirane, ether with 2,2',2''-nitrilotris[ethanol] (3:1) (9CI) (CA INDEX NAME)

CM 1

CRN 102-71-6

CMF C6 H15 N O3



CM 2

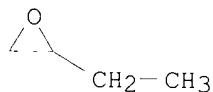
CRN 27517-34-6

CMF (C4 H8 O . C2 H4 O) x

CCI PMS

CM 3

CRN 106-88-7
CMF C4 H8 O



CM 4

CRN 75-21-8
CMF C2 H4 O



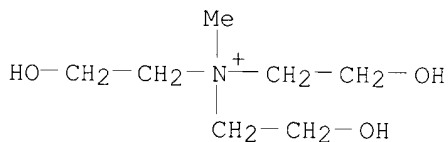
IT **194303-54-3DP**, unsatd. fatty acid esters
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(compn. useful for softening applications and processes for the prepn. thereof)
RN 194303-54-3 HCA
CN Oxirane, methyl-, polymer with oxirane, ether with 2-hydroxy-N,N-bis(2-hydroxyethyl)-N-methylethanaminium chloride (3:1) (9CI) (CA INDEX NAME)

CM 1

CRN 178603-53-7
CMF C7 H18 N O3 . 3 (C3 H6 O . C2 H4 O)x

CM 2

CRN 44971-58-6
CMF C7 H18 N O3

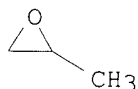


CM 3

CRN 9003-11-6
CMF (C3 H6 O . C2 H4 O)x
CCI PMS

CM 4

CRN 75-56-9
CMF C3 H6 O



CM 5

CRN 75-21-8

CMF C2 H4 O

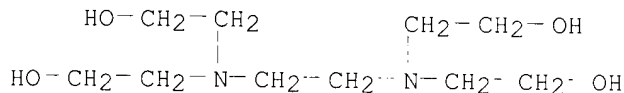


- L37 ANSWER 4 OF 16 HCA COPYRIGHT 2003 ACS
- 129:277711 Aqueous alkali **cleaning** compositions. Cala, Francis R.; Reynolds, Richard A. (Church and Dwight Co., Inc., USA). U.S. US 5814588 A 19980929, 14 pp. (English). CODEN: USXXAM. APPLICATION: US 1996-617606 19960319.
- AB Aq. alkali **cleaning** compns. contain an alkali metal salt, an N-alkyl pyrrolidone deriv., and specific ethylene oxide/propylene oxide block copolymers having mol. wt. 1500-2500. Such compns. can be employed as an aq. conc. or soln. to **clean** a substrate such as a circuit board, wiring board or metal surface. Specific ethylene oxide/propylene oxide block copolymers protect plastic parts from corrosion by N-alkyl pyrrolidone derivs. without compromising N-alkyl pyrrolidone deriv. **cleaning** ability.
- IC ICM C11D001-722
ICS C11D003-10; C11D003-37; C11D003-28
- NCL 510175000
- CC **46-6** (Surface Active Agents and Detergents)
- ST aq alkali **cleaning** compn; alkyl pyrrolidone **cleaning** compn; ethylene propylene oxide block copolymer **detergent**
- IT Alcohols, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(C12-15, ethoxylated, ethoxylated propoxylated; aq. alkali **cleaning** compns.)
- IT Alcohols, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(alkoxy, C12-15, ethoxylated propoxylated; aq. alkali **cleaning** compns.)
- IT **Detergents**
(aq. alkali **cleaning** compns.)
- IT 9002-86-2D, Polyvinyl chloride, chlorinated
RL: MSC (Miscellaneous)
(aq. alkali **cleaning** compns.)
- IT 497-19-8, Sodium Carbonate, uses 584-08-7, Potassium Carbonate 616-45-5D, Pyrrolidone, N-alkyl derivs. 1310-73-2, Sodium Hydroxide, uses 1312-76-1, Kasil #1 2687-94-7, Surfadone LP100 2687-96-9, 1-Dodecyl-2-pyrrolidone 55257-88-0, 1-Decyl-2-pyrrolidone 56590-81-9, Plurafac RA40 59005-06-0 84501-72-4, Monatropo 1250 104492-20-8, Industrol-DW5 106392-12-5, Pluronic L31 **107397-59-1**, Tetronic 150R1 133687-11-3, Polytergent CS-1 162430-60-6, Polytergent SL42 184378-39-0, Carbopol 625
RL: TEM (Technical or engineered material use); USES (Uses)
(aq. alkali **cleaning** compns.)
- IT **107397-59-1**, Tetronic 150R1
RL: TEM (Technical or engineered material use); USES (Uses)
(aq. alkali **cleaning** compns.)
- RN 107397-59-1 HCA
- CN Oxirane, methyl-, polymer with oxirane, ether with 2,2',2'',2'''-(1,2-ethanediyldinitrilo)tetrakis[ethanol] (4:1), block (9CI) (CA INDEX NAME)

CM 1

CRN 140-07-8

CMF C10 H24 N2 O4



CM 2

CRN 106392-12-5

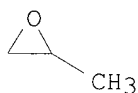
CMF (C3 H6 O . C2 H4 O)x

CCI PMS

CM 3

CRN 75-56-9

CMF C3 H6 O



CM 4

CRN 75-21-8

CMF C2 H4 O



L37 ANSWER 5 OF 16 HCA COPYRIGHT 2003 ACS

129:204458 Skin-mild **detergent** composition for good conditioning effect and sudsing property. Nakagawa, Ryuichi; Yokoi, Kenji (Lion Corp., Japan). Jpn. Kokai Tokkyo Koho JP 10195481 A2 19980728 Heisei, 12 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-358574 19961227.

AB The compn. comprises (a) amido ether sulfate ester and/or amido ether carboxylic acid-type surfactants and (b) guanidine deivs. with specified structures. A compn. comprised dodecanoic acid monoethanolamido polyoxyethylene sulfate ester triethanolamine salt 10, C12H25CONH(CH2)3NHC(:NH)NH2 2, and water to 100%, showing good sudsing property and mildness to hair.

ICM C11D001-28

ICS C11D001-66; C11D001-83

CC 46-6 (Surface Active Agents and Detergents)

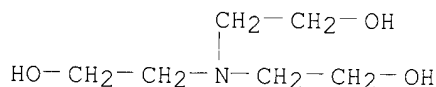
Section cross-reference(s): 62

ST **detergent** compn conditioning effect sudsing property; guanidine deriv **detergent** skin mild; surfactant amido ether ester **detergent**

IT Surfactants

(anionic, amido ether sulfate ester and/or amido ether carboxylic acids; skin-mild **detergent** compn. for good conditioning

- effect and sudsing property)
- IT Polyoxyalkylenes, uses
 RL: BUU (Biological use, unclassified); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)
 (coco fatty acid isopropanolamide deriv., sulfate ester, sodium salt; skin-mild **detergent** compn. for good conditioning effect and sudsing property)
- IT Hair preparations
 (conditioners; skin-mild **detergent** compn. for good conditioning effect and sudsing property)
- IT **Detergents**
 (laundry; skin-mild **detergent** compn. for good conditioning effect and sudsing property)
- IT Bath preparations
Detergents
Shampoos
 (skin-mild **detergent** compn. for good conditioning effect and sudsing property)
- IT 113-00-8D, Guanidine, coco fatty acid alkyl amide deriv. 25322-68-3D, coco fatty acid isopropanolamide deriv., sulfate ester, sodium salt
 26635-75-6 31886-11-0 32993-45-6 32993-46-7 78125-60-7
 100424-86-0 131151-36-5 136862-13-0 159858-54-5 160920-19-4
 174303-63-0 185330-56-7 211371-95-8 211516-05-1 211516-07-3
 211516-08-4 211516-09-5 211516-10-8 211516-11-9 211516-12-0
 211557-59-4 211557-61-8 211577-91-2 211638-45-8 211638-46-9
 211697-32-4 211697-33-5 **211949-40-5**
 RL: BUU (Biological use, unclassified); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)
 (skin-mild **detergent** compn. for good conditioning effect and sudsing property)
- IT **211949-40-5**
 RL: BUU (Biological use, unclassified); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)
 (skin-mild **detergent** compn. for good conditioning effect and sudsing property)
- RN 211949-40-5 HCA
- CN Ethanol, 2,2',2''-nitrilotris-, compd. with methyloxirane polymer with oxirane carboxymethyl 2-[methyl(1-oxoisooctadecyl)amino]ethyl ether (9CI)
 (CA INDEX NAME)
- CM 1
- CRN 102-71-6
 CMF C6 H15 N O3



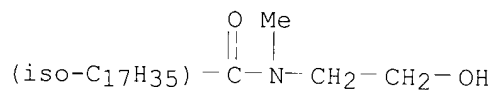
CM 2

CRN 211949-39-2
 CMF C21 H43 N O2 . (C3 H6 O . C2 H4 O)x . C2 H4 O3

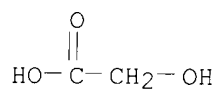
CM 3

CRN 211557-58-3
 CMF C21 H43 N O2

CCI IDS



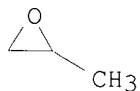
CM 4

CRN 79-14-1
CMF C2 H4 O3

CM 5

CRN 9003-11-6
CMF (C3 H6 O . C2 H4 O)x
CCI PMS

CM 6

CRN 75-56-9
CMF C3 H6 O

CM 7

CRN 75-21-8
CMF C2 H4 O

=> d L37 6-17 cbib abs hitind hitstr

L37 ANSWER 6 OF 16 HCA COPYRIGHT 2003 ACS

125:13845 Plasticware-compatible rinse aid with good sheeting of aqueous rinse liquid from solid surface. Man, Victor F. (Ecolab Inc., USA). U.S. US 5501815 A 19960326, 11 pp. (English). CODEN: USXXAM. APPLICATION: US 1994-312460 19940926.

AB The title rinse aid comprises 5-10% alkyl (5-30 C atoms) polyglycoside (APG) and 5-40% polyoxyethylene-contg. block copolymer (ethylene oxide <50%) surfactant and is compatible with thermoplastics such as polycarbonate and polysulfone.

IC ICM C11D001-66
ICS C11D003-00; C11D007-26; C11D007-00

NCL 252174170

CC 46-6 (Surface Active Agents and Detergents)

Section cross-reference(s): 38

IT Detergents

(cleaning compns., rinse aid; plasticware-compatible rinse aid with good sheeting of aq. rinse liq. from solid surface)

IT 107498-00-0 127362-04-3

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(rinse aid conc. contg. alkyl polyglycoside an; plasticware-compatible rinse aid with good sheeting of aq. rinse liq. from solid surface)

IT 127362-04-3

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(rinse aid conc. contg. alkyl polyglycoside an; plasticware-compatible rinse aid with good sheeting of aq. rinse liq. from solid surface)

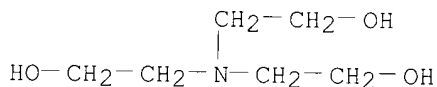
RN 127362-04-3 HCA

CN Oxirane, methyl-, polymer with oxirane, ether with 2,2',2''-nitrilotris[ethanol] (3:1), block (9CI) (CA INDEX NAME)

CM 1

CRN 102-71-6

CMF C6 H15 N O3



CM 2

CRN 106392-12-5

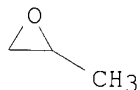
CMF (C3 H6 O . C2 H4 O)x

CCI PMS

CM 3

CRN 75-56-9

CMF C3 H6 O



CM 4

CRN 75-21-8

CMF C2 H4 O



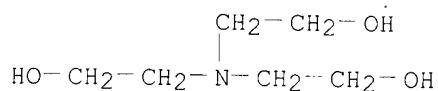
L37 ANSWER 7 OF 16 HCA COPYRIGHT 2003 ACS
121:159774 **Detergent** compositions containing sulfoalkanoate esters

- with mildness to skin. Okano, Tomomichi; Fukuda, Masahiro; Tanabe, Junko; Ono, Masato; Akabane, Yasuhiro; Takahashi, Hisao; Egawa, Naoyuki; Sakatani, Takenobu; Kanao, Hirofumi (Lion Corp., Japan). PCT Int. Appl. WO 9325646 A1 19931223, 80 pp. DESIGNATED STATES: W: KR, US; RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE. (English). CODEN: PIXXD2. APPLICATION: WO 1993-JP811 19930616. PRIORITY: JP 1992-183144 19920617; JP 1992-352707 19921210; JP 1992-352980 19921210; JP 1992-352981 19921210; JP 1992-352982 19921210; JP 1992-352983 19921210.
- AB Surfactants R1CH(SO3M1)CO2(AO)pH, R2CH(SO3M2)CO2(AO)mCOCH(SO3M3)R3, and R4CH(SO3M4)CO2(AO)nR5 (R1-4 = C6-24 alkyl or alkenyl; R5 = C1-4 alkyl; M1-4 = H, cation; AO = oxyalkylene or residue of polyhydric alc.; p, m, n .gtoreq. 1) cause little irritation of skin, have good soly. in water, a low crit micelle concn., and a low Krafft point, and are useful in **detergent** compns. for washing skin, hair, fabrics, dishes, hard surfaces, etc. An aq. compn. for washing skin contained 10.0% polyethylene glycol bis(.alpha.-sulfomyristate) Na salt, 10.0% K myristate, and small amts. of additives.
- IC ICM C11D001-28
ICS C11D001-37; C07C303-28
- CC **46-6** (Surface Active Agents and Detergents)
Section cross-reference(s): 23, 62
- ST sulfoalkanoate ester polyol **detergent** mildness; skin
cleaner sulfoalkanoate ester mildness; polyethylene glycol
sulfoalkanoate **detergent** mildness; **laundry**
detergent sulfoalkanoate ester; **dishwashing**
detergent sulfoalkanoate ester; **shampoo** surfactant
sulfoalkanoate ester; glycol sulfoalkanoate ester **detergent**
mildness
- IT **Shampoos**
(surfactants for, with mildness to skin, sulfoalkanoate esters as)
- IT **Detergents**
(**cleaning** compns., surfactants for, with mildness to skin,
sulfoalkanoate esters as)
- IT **Detergents**
(**dishwashing**, surfactants for, with mildness to skin,
sulfoalkanoate esters as)
- IT **Detergents**
(**laundry**, surfactants for, with mildness to skin,
sulfoalkanoate esters as)
- IT 4016-19-7 25322-68-3D, esters with .alpha.-sulfo fatty acids, salts
26699-61-6 27879-07-8D, Polyethylene glycol monoethyl ether, esters with
.alpha.-sulfo fatty acids, salts 106392-12-5D, Ethylene oxide-propylene
oxide block copolymer, esters with .alpha.-sulfo fatty acids, sodium salts
116214-23-4 144096-67-3 144118-46-7 148782-39-2 150568-61-9
156494-95-0 156494-96-1 157116-26-2 157116-27-3 157116-28-4
157116-29-5 157116-30-8 157116-31-9 157116-32-0 157116-33-1
157116-34-2 157116-35-3 157116-36-4 157116-37-5 157116-38-6
157116-39-7 157116-40-0 157116-41-1 157116-42-2 157116-43-3
157116-44-4 157116-45-5 157175-96-7 **157241-14-0**
157351-18-3 157351-19-4 157351-22-9 157351-32-1 157351-33-2
157382-11-1 157382-12-2 157478-00-7 157565-99-6 157566-00-2
RL: TEM (Technical or engineered material use); USES (Uses)
(surfactants, with mildness to skin)
- IT **157241-14-0**
RL: TEM (Technical or engineered material use); USES (Uses)
(surfactants, with mildness to skin)
- RN 157241-14-0 HCA
- CN .alpha.-D-Glucopyranoside, .beta.-D-fructofuranosyl, bis(2-
sulfohexadecanoate), compd. with 2,2',2''-nitrilotris[ethanol] (1:2) (9CI)
(CA INDEX NAME)

CM 1

CRN 102-71-6

CMF C6 H15 N O3



CM 2

CRN 157241-13-9

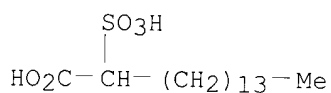
CMF C44 H82 O19 S2

CCI IDS

CM 3

CRN 1782-10-1

CMF C16 H32 O5 S

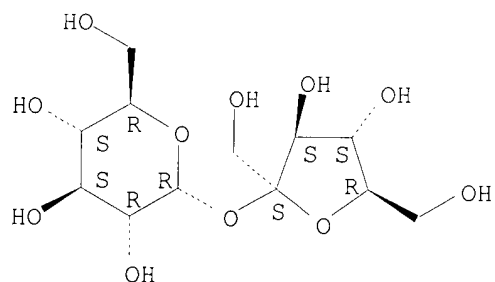


CM 4

CRN 57-50-1

CMF C12 H22 O11

Absolute stereochemistry.



L37 ANSWER 8 OF 16 HCA COPYRIGHT 2003 ACS

118:149885 Alkyl glycoside-containing nonionic **detergent**

compositions mild to skin. Nishida, Masao; Ishikawa, Satoyuki; Kanao, Hirofumi (Lion Corp., Japan). Jpn. Kokai Tokkyo Koho JP 04292695 A2 19921016 Heisei, 9 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1991-81015 19910319.

AB The title compns. showing good low-temp. storability and foaming power and no sliming contain (A) alkyl glycosides RO(R1O)yZx (R = C8-16 alkyl, alkenyl, alkylphenyl; R1 = C2-4 alkylene; Z = C5-6 sugar residue; x = 1-10; y = 0-15) and (B) surfactant(s) chosen from fatty acid alkanolamide, RO(CH2CH2O)nH (R = C8-14 alkyl, alkenyl; n = 3-15) of specifically defined

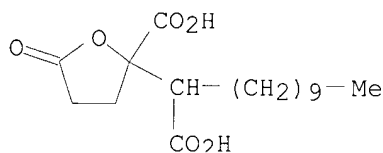
compn., sugar ester-type surfactants from C6-14 fatty acid and C5-6 monosaccharide or its monoalkyl ether, ester (or its salt) from succinic acid and C8-12 fatty acid monoglyceride, and 4,5-dicarboxy-4-pentadecanolide. A **detergent** comprised alkyl glucoside 15, lauric acid diethanolamide 5, 1-O-methylglucose octanoate 5, hydrotrope 5, and water and perfume to 100%.

IC ICM C11D001-68
ICS C11D001-835
IC1 C11D001-835, C11D001-68, C11D001-72, C11D001-52, C11D001-74
CC **46-6** (Surface Active Agents and Detergents)
ST liq **detergent** alkyl glycoside mild; nonionic **detergent** fatty acid alkanolamide; monosaccharide ester nonionic **detergent** mild; succinate nonionic **detergent** mild; pentadecanolide nonionic **detergent** mild
IT Glycosides
RL: USES (Uses)
(alkyl, nonionic liq. **detergents** contg., mild with no sliminess)
IT **Detergents**
(liq., nonionic, alkyl glycoside-based, mild, with no sliminess)
IT 120-40-1, Lauric acid diethanolamide 1643-20-5, Lauryldimethylamine oxide 9002-92-0, Polyethylene glycol dodecyl ether 25155-30-0, Sodium dodecylbenzenesulfonate 25322-68-3D, alkyl ether, sulfate, sodium salts 25322-68-3D, ethers 65759-98-0 86360-31-8 86360-32-9 146701-88-4 146701-90-8 146701-91-9 **146763-98-6**
RL: USES (Uses)
(alkyl glycoside-based nonionic liq. **detergents** contg., mild with no sliminess)
IT **146763-98-6**
RL: USES (Uses)
(alkyl glycoside-based nonionic liq. **detergents** contg., mild with no sliminess)
RN 146763-98-6 HCA
CN 2-Furanacetic acid, 2-carboxy-.alpha.-decyltetrahydro-5-oxo-, compd. with 2,2',2''-nitrilotris[ethanol] (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 65759-98-0

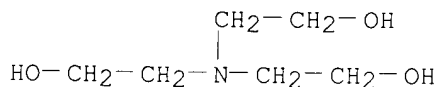
CMF C17 H28 O6



CM 2

CRN 102-71-6

CMF C6 H15 N O3



L37 ANSWER 9 OF 16 HCA COPYRIGHT 2003 ACS
115:258747 **Detergent** compositions containing a mixture of an ethylene oxide-propylene oxide block copolymer and a polycarboxylate for **laundrying**. Secemski, Isaac I.; Lynn, Jesse L. (Lever Brothers Co., USA). U.S. US 5049303 A 19910917, 9 pp. (English). CODEN: USXXAM. APPLICATION: US 1988-269382 19881109.

AB The title mixt. is added to **laundry detergents** contg. non-phosphorus builders to enhance the removal of clay soil. An ethylene oxide-propylene oxide block copolymer (Pluronic F98) and Sokalan CP5 were added to a mixt. of Na alkylbenzenesulfonate, Na₂CO₃, Na silicate, CM-cellulose Na salt, and Na₂SO₄.

IC ICM C11D003-395
NCL 252548000
CC **46-5** (Surface Active Agents and Detergents)
ST **laundry detergent** clay soil removal; polyoxyalkylene block **laundry detergent**; carboxy polymer **laundry detergent**; polycarboxylate **laundry detergent**; builder nonphosphorus **laundry detergent**; maleic polymer **laundry detergent**; acrylic polymer **laundry detergent**

IT Zeolites, uses and miscellaneous
RL: TEM (Technical or engineered material use); USES (Uses) (**laundry detergents** contg., clay soil removal by, additives for)

IT Polyoxymethylenes, compounds
RL: TEM (Technical or engineered material use); USES (Uses) (carboxylated, **laundry detergents** contg., for clay soil removal)

IT **Detergents**
(**laundry**, non-phosphorus builder-contg., clay soil removal by, additives for)

IT Carboxylic acids, polymers
RL: TEM (Technical or engineered material use); USES (Uses) (polymers, **laundry detergents** contg., for clay soil removal)

IT 497-19-8, Sodium carbonate, uses and miscellaneous 994-36-5, Sodium citrate 1344-09-8 102087-15-0, Builder U
RL: TEM (Technical or engineered material use); USES (Uses) (**laundry detergents** contg., clay soil removal by, additives for)

IT 25549-84-2, Poly(acrylic acid)sodium salt 60472-42-6 106392-12-5, Pluronic F98 **107397-59-1** 110617-70-4, Tetronic 908
RL: TEM (Technical or engineered material use); USES (Uses) (**laundry detergents** contg., for clay soil removal)

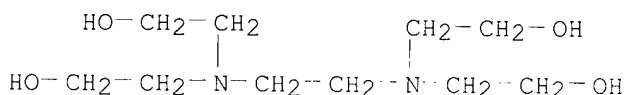
IT 1335-30-4
RL: USES (Uses) (zeolites, **laundry detergents** contg., clay soil removal by, additives for)

IT **107397-59-1**
RL: TEM (Technical or engineered material use); USES (Uses) (**laundry detergents** contg., for clay soil removal)

RN 107397-59-1 HCA
CN Oxirane, methyl-, polymer with oxirane, ether with 2,2',2'',2'''-(1,2-ethanediyldinitrilo)tetrakis[ethanol] (4:1), block (9CI) (CA INDEX NAME)

CM 1

CRN 140-07-8
CMF C10 H24 N2 O4



CM 2

CRN 106392-12-5

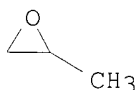
CMF (C3 H6 O . C2 H4 O) x

CCI PMS

CM 3

CRN 75-56-9

CMF C3 H6 O



CM 4

CRN 75-21-8

CMF C2 H4 O



L37 ANSWER 10 OF 16 HCA COPYRIGHT 2003 ACS

115:185798 Maleic anhydride copolymer salts for sequesterant fabric **laundering**. Klopotek, Alojzy; Wlasiuk, Danuta (Instytut Chemii Przemyslowej, Pol.). Pol. PL 152539 B1 19910131, 12 pp. (Polish). CODEN: POXXA7. APPLICATION: PL 1987-264343 19870227.

AB Salts for the title use are manufd. by Bz2O2-catalyzed polymn. of 2-8 mol maleic anhydride (I) with 1-3 mol C1-5 alkyl methacrylates for 4-10 h at 393-433 K in an org. solvent, e.g., xylene, under an inert atm. and neutralization of the product with .gtoreq.1 of alkali-metal hydroxides, NH4OH, monoethanolamine, diethanolamine, and triethanolamine for 0.5-2 h at 303-353 K. Thus, heating 67.9 g I and 30 g Me methacrylate in 186 g xylene from 293 to 413 K in 4 h under N, heating the mixt. 4 h at 413 K, and treating 95 g of the product 1 h with 542 g 10% aq. NaOH at 333 K gave a 21.3% aq. soln. of a Na salt of a polymer with mol. wt. 14,000, which exhibited better complexation ability for Ca2+ and Mg2+ than a methacrylic acid-I copolymer.

IC ICM C08F222-06

ICS C08F220-14

CC **46-5** (Surface Active Agents and Detergents)

Section cross-reference(s): 35

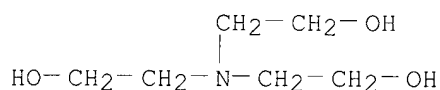
ST maleic copolymer salt sequesterant **laundry**; methacrylate maleic copolymer salt sequesterant

IT Sequestering agents

(alkyl methacrylate-maleic anhydride copolymer salts, for **laundry**)

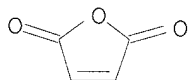
IT **Detergents**

(laundry, polymeric sequestering agents for)
IT 95907-80-5P 136585-33-6P 136585-34-7P 136585-36-9P 136585-37-0P
136585-38-1P 136651-75-7P
RL: PREP (Preparation)
(manuf. of, for sequestrants for fabric **laundry**)
IT 136585-38-1P
RL: PREP (Preparation)
(manuf. of, for sequestrants for fabric **laundry**)
RN 136585-38-1 HCA
CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2,5-furandione,
compd. with 2,2',2''-nitrilotris[ethanol] (9CI) (CA INDEX NAME)
CM 1
CRN 102-71-6
CMF C6 H15 N O3

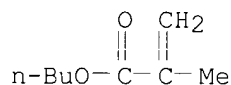


CM 2
CRN 68103-60-6
CMF (C8 H14 O2 . C4 H2 O3)x
CCI PMS

CM 3
CRN 108-31-6
CMF C4 H2 O3



CM 4
CRN 97-88-1
CMF C8 H14 O2

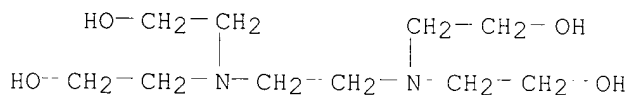


L37 ANSWER 11 OF 16 HCA COPYRIGHT 2003 ACS
107:201026 Liquid **detergent** composition. Pancheri, Eugene Joseph;
Oh, Young Sik; Wise, Rodney Mahlon (Procter and Gamble Co., USA). Eur.
Pat. Appl. EP 222557 A2 19870520, 28 pp. DESIGNATED STATES: R: AT, BE,
CH, DE, FR, GB, GR, IT, LI, NL, SE. (English). CODEN: EPXXDW.
APPLICATION: EP 1986-308453 19861030. PRIORITY: US 1985-793530 19851031;
US 1986-918567 19861020.
AB High-sudsing liq. **detergents**, esp. useful for washing tableware,
kitchen utensils and other hard surfaces and having good ability to

clean greasy surfaces, contained 5-50% anionic surfactants, 0.1-12% polymeric surfactants AnBAm, BnABm, BA, and/or B (B = hydrophobic group: A = hydrophilic group; n and m = 0-50; n + m = 1-50; each mol. contains 5-1000 ether linkages; in BA, B contains 5-500 ether linkages; in B, the CH₂/ether linkage ratio = 2.1-3; mol. wt. = 400-60000; each mol. contains <90% C₂H₄O groups), suds-stabilizing nonionic surfactants 0-10, **detergent** builder 0-10, C1-6 alkanols 0-15, and water 20-90%. The light-duty **detergent** contained Na C11.8-alkylbenzenesulfonate 14.8, Na C12-13-alkyl ether sulfate 17.3, C12-14-alkyldimethylbetaine 1.5, Pluronic 64 0.175, ethoxylated (8-10 mol) C10-alkanol 4.7, coco fatty acid monoethanolamide 3.8, urea 5.0, and EtOH 6.04, the balance being water and additives.

- IC ICM C11D017-00
ICS C11D001-02; C11D003-37
- CC **46-6** (Surface Active Agents and Detergents)
- ST **dishwashing** liq **detergent** grease removal;
polyoxyethylene deriv **detergent dishwashing**;
polyoxypropylene deriv **detergent dishwashing**; betaine
detergent dishwashing; alkylbenzenesulfonate
detergent dishwashing; sulfate ethoxylate
detergent dishwashing
- IT Polyoxyalkylenes, uses and miscellaneous
RL: USES (Uses)
(liq. **dishwashing detergents** contg., for grease removal)
- IT **Detergents**
(**dishwashing**, liq., polymeric surfactant-contg., grease-removing)
- IT Polyoxyalkylenes, uses and miscellaneous
RL: USES (Uses)
(polyamine-, liq. **dishwashing detergents** contg., for grease removal)
- IT Polyoxyalkylenes, uses and miscellaneous
RL: USES (Uses)
(polyester-, liq. **dishwashing detergents** contg., for grease removal)
- IT Polyamines
Polyesters, uses and miscellaneous
RL: USES (Uses)
(polyoxyalkylene-, liq. **dishwashing detergents** contg., for grease removal)
- IT 4292-10-8 9003-11-6 9004-96-0 9005-02-1, Polyethyleneglycol
dilaurate 9005-07-6 9005-08-7 11111-34-5 25322-69-4, Polypropylene
glycol 52228-31-6 **56449-04-8** 97088-62-5 106392-12-5
106494-51-3 107498-00-0 110563-70-7 110586-55-5 110617-69-1
110736-60-2 111265-30-6 111265-31-7
RL: USES (Uses)
(liq. **dishwashing detergents** contg., for grease removal)
- IT **56449-04-8**
RL: USES (Uses)
(liq. **dishwashing detergents** contg., for grease removal)
- RN 56449-04-8 HCA
- CN Oxirane, methyl-, polymer with oxirane, ether with 2,2',2'',2'''-(1,2-ethanediyldinitrilo)tetrakis[ethanol] (4:1) (9CI) (CA INDEX NAME)
- CM 1
- CRN 140-07-8

CMF C10 H24 N2 O4



CM 2

CRN 9003-11-6

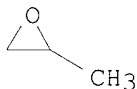
CMF (C3 H6 O . C2 H4 O)x

CCI PMS

CM 3

CRN 75-56-9

CMF C3 H6 O



CM 4

CRN 75-21-8

CMF C2 H4 O



L37 ANSWER 12 OF 16 HCA COPYRIGHT 2003 ACS

107:157045 Liquid **detergent** composition. Pancheri, Eugene Joseph; Mao, Mark Hsiang Kuen (Procter and Gamble Co., USA). Eur. Pat. Appl. EP 221774 A2 19870513, 25 pp. DESIGNATED STATES: R: AT, BE, CH, DE, FR, GB, GR, IT, LI, NL, SE. (English). CODEN: EPXXDW. APPLICATION: EP 1986-308454 19861030. PRIORITY: US 1985-793529 19851031; US 1986-918566 19861020.

AB High-sudsing liq. **detergents**, esp. useful for washing tableware, kitchen utensils, and other hard surfaces and having good ability to **clean** greasy surfaces, contain 5-50% anionic surfactant, 0.1-12% polymeric surfactants AnBAm, BnABm, BA, and/or B (B = hydrophobic group; A = hydrophilic group; n and m = 0-50; n + m = 1-50; each mol. contains 5-1000 ether linkages; in BA, B contains 5-500 ether linkages; in B, the CH2/ether linkage ratio = 2.1-3; mol. wt. = 400-60,000; each mol. contains <90% C2H4O groups), and 0.5-15% betaine surfactant R2N+R1ZCO2- (R = C1-3 alkyl; R1 = C10-22 alkyl, alkylaryl, etc.; Z = C1-6 alkylene). A light-duty **detergent** contained Na C11.8-alkylbenzenesulfonate 14.8, Na C12-13-alkyl ether sulfate 17.3, C12-14-alkyldimethylbetaine 1.5, Pluronic 64 0.175, ethoxylated (8-10 mol) C10 alkanol 4.7, coco fatty acid monoethanolamide 3.8, urea 5.0, and EtOH 6.0%, the balance being water and additives.

IC ICM C11D017-00

ICS C11D001-94; C11D003-37

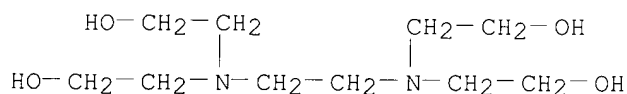
CC **46-6** (Surface Active Agents and Detergents)ST **dishwashing detergent** grease removal; polyoxyethylene

- deriv **detergent dishwashing**; polyoxypropylene deriv
detergent dishwashing; betaine **detergent**
dishwashing; alkylbenzenesulfonate **detergent**
dishwashing; sulfate alkyl ether **dishwashing**
- IT Polyoxyalkylenes, uses and miscellaneous
 RL: TEM (Technical or engineered material use); USES (Uses)
 (surfactants, liq. **dishwashing detergents** contg.)
- IT **Detergents**
 (**dishwashing**, liq., grease-removing, contg. surface-active
 polyoxyalkylenes)
- IT Polyoxyalkylenes, uses and miscellaneous
 RL: TEM (Technical or engineered material use); USES (Uses)
 (polyamine-, surfactants, liq. **dishwashing detergents**
 contg.)
- IT Polyoxyalkylenes, uses and miscellaneous
 RL: TEM (Technical or engineered material use); USES (Uses)
 (polyester-, surfactants, liq. **dishwashing detergents**
 contg.)
- IT Polyamines
 Polyesters, uses and miscellaneous
 RL: TEM (Technical or engineered material use); USES (Uses)
 (polyoxyalkylene-, surfactants, liq. **dishwashing**
detergents contg.)
- IT 110617-70-4
 RL: TEM (Technical or engineered material use); USES (Uses)
 (**detergents** contg., **dishwashing**, liq.,
 crease-removing)
- IT 4292-10-8, Lexaine LM 9004-96-0, Polyethylene glycol monooleate
 9005-02-1, Polyethylene glycol dilaurate 9005-07-6, Polyethylene glycol
 dioleate 9005-08-7, Polyethylene glycol distearate 25322-68-3
 25322-69-4, Polypropylene glycol 52228-31-6, Polyethylene glycol
 1,12-dodecanediol ether 74623-31-7 97088-62-5 106392-12-5
 106494-51-3 106646-68-8 106869-68-5 **107397-59-1**
 107498-00-0 110541-27-0 110541-28-1 110563-70-7 110586-56-6
 110617-69-1
 RL: TEM (Technical or engineered material use); USES (Uses)
 (**detergents** contg., **dishwashing**, liq.,
 grease-removing)
- IT **107397-59-1**
 RL: TEM (Technical or engineered material use); USES (Uses)
 (**detergents** contg., **dishwashing**, liq.,
 grease-removing)
- RN 107397-59-1 HCA
- CN Oxirane, methyl-, polymer with oxirane, ether with 2,2',2'',2'''-(1,2-
 ethanediylidinitrilo)tetrakis[ethanol] (4:1), block (9CI) (CA INDEX NAME)

CM 1

CRN 140-07-8

CMF C10 H24 N2 O4



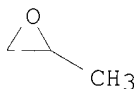
CM 2

CRN 106392-12-5

CMF (C3 H6 O . C2 H4 O)x
CCI PMS

CM 3

CRN 75-56-9
CMF C3 H6 O



CM 4

CRN 75-21-8
CMF C2 H4 O



L37 ANSWER 13 OF 16 HCA COPYRIGHT 2003 ACS

104:70563 Wastepaper deinking agents. Koike, Yoshihiro (Nippon Oils and Fats Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 60155794 A2 19850815 Showa, 7 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1984-10888 19840124.

AB The title agents comprise 20-80% C10-20 fatty acids or their **soaps** with 20-80% ROZSO3M (I) [R = C8-22-alkyl, alkenyl, C8-12-alkylphenyl; Z = (C2H4O)m.(C3H6O)n [m + n = 5-30; m/(m + n) = 0.4-0.9]; M = alkali metal, NH4, or alkanolammonium]. Thus, newsprint and handbills were disintegrated at 60.degree. in H2O contg. NaOH 1.0, Na silicate 3.0, 35% H2O2 3.0, lauric acid 0.3, and I [R = C12H25; m + n = 10, m/(m + n) = 0.8; M = Na] 0.3%, dild., and sepd. by flotation to give a pulp slurry. Paper prepd. from the slurry had brightness 55.9% and residual ink no. 52, compared with 47.4% and 160, resp. without I.

IC ICM D21C005-02

CC 43-7 (Cellulose, Lignin, Paper, and Other Wood Products)
Section cross-reference(s): **46**, 60

IT Fatty acids, uses and miscellaneous

Soaps

RL: USES (Uses)

(deinking agents contg., for wastepaper)

IT 57-10-3, uses and miscellaneous 57-11-4, uses and miscellaneous
112-80-1, uses and miscellaneous 143-19-1 544-63-8, uses and
miscellaneous 629-25-4 2437-23-2 10124-65-9 65423-84-9
83138-50-5 99752-71-3 99752-72-4 **100180-10-7**

RL: USES (Uses)

(deinking agents contg., for wastepaper)

IT **100180-10-7**

RL: USES (Uses)

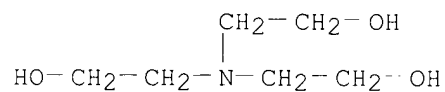
(deinking agents contg., for wastepaper)

RN 100180-10-7 HCA

CN Ethanol, 2,2',2''-nitrilotris-, compd. with methyloxirane polymer with
oxirane, mono(hydrogen sulfate), dodecyl ether (1:1) (9CI) (CA INDEX
NAME)

CM 1

CRN 102-71-6
CMF C6 H15 N O3

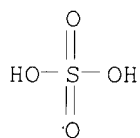


CM 2

CRN 68439-26-9
CMF C12 H26 O . (C3 H6 O . C2 H4 O)x . H2 O4 S

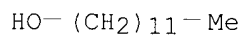
CM 3

CRN 7664-93-9
CMF H2 O4 S



CM 4

CRN 112-53-8
CMF C12 H26 O

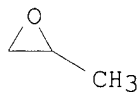


CM 5

CRN 9003-11-6
CMF (C3 H6 O . C2 H4 O)x
CCI PMS

CM 6

CRN 75-56-9
CMF C3 H6 O



CM 7

CRN 75-21-8
CMF C2 H4 O



L37 ANSWER 14 OF 16 HCA COPYRIGHT 2003 ACS

94:141601 Oil dispersants. Hancock, Roger Ian; Cornes, Peter Leslie (Imperial Chemical Industries Ltd., UK). Eur. Pat. Appl. EP 21571 19810107, 13 pp. (English). CODEN: EPXXDW. APPLICATION: EP 1980-301471 19800506.

AB An oil dispersant, useful in tank **cleaning** and dispersing oil spills at sea, comprises a compd. contg. .gtoreq.3 polyalkylene glycol residues (e.g., a hexamethylene diamine-ethylene oxide-propylene oxide condensate), a nonionic surfactant, and a solvent for these materials which is oil-sol.

IC B01F017-42; C09K003-32

CC **46-4** (Surface Active Agents and Detergents)

Section cross-reference(s): 51, 61

ST dispersant marine petroleum spill; polyoxyalkylene dispersant oil spill; oil tank **cleaning detergent**

IT Dispersing agents

(polyalkylene glycol derivs., for marine oil spills and oil tank **cleaning**)

IT 75-21-8D, reaction products with phenolic resins and propylene oxide

75-56-9D, reaction products with ethylene oxide and phenolic resins

110-80-5 141-43-5, uses and miscellaneous 629-82-3 2306-88-9

7580-85-0 9003-11-6 9063-06-3 25322-68-3D, tall-oil fatty esters

29063-28-3 37286-64-9 61827-42-7 **77137-69-0**

RL: USES (Uses)

(dispersants contg., for marine oil spills)

IT **77137-69-0**

RL: USES (Uses)

(dispersants contg., for marine oil spills)

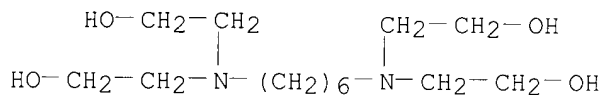
RN 77137-69-0 HCA

CN Oxirane, methyl-, polymer with oxirane, ether with 2,2',2'',2'''-(1,6-hexanediyl dinitrilo) tetrakis[ethanol] (4:1) (9CI) (CA INDEX NAME)

CM 1

CRN 42454-47-7

CMF C14 H32 N2 O4



CM 2

CRN 9003-11-6

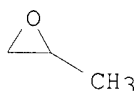
CMF (C3 H6 O . C2 H4 O)x

CCI PMS

CM 3

CRN 75-56-9

CMF C3 H6 O



CM 4

CRN 75-21-8

CMF C2 H4 O



L37 ANSWER 15 OF 16 HCA COPYRIGHT 2003 ACS

90:153005 Oxyethylated-oxypropylated propanediamine polymeric

detergent. Ropuszynski, Stanislaw; Domanska, Aleksandra
(Politechnika Wroclawska, Pol.). Pol. PL 98098 19780831, 2 pp. (Polish).
CODEN: POXXA7. APPLICATION: PL 1976-189062 19760423.

AB The synthesis is described of $\text{MeCHN}[(\text{CHMeCH}_2\text{O})_a(\text{CH}_2\text{CH}_2\text{O})_m\text{H}][(\text{CHMeCH}_2\text{O})_6(\text{CH}_2\text{CH}_2\text{O})_n\text{H}]\text{CH}_2\text{N}[(\text{CHMeCH}_2\text{O})_c(\text{CH}_2\text{CH}_2\text{O})_o\text{H}](\text{CHMeCH}_2\text{O})_d(\text{CH}_2\text{CH}_2\text{CH}_2\text{O})_p\text{H}$ (I) [69522-56-1], with $a + b + c + d = 21.7-32.5$ and $m + n + o + p = 11.1-38.8$. E.g. the oxypropylation of 1,2-propanediamine [78-90-0] at 110.degree. gave liq. N,N,N',N'-tetrakis(2-hydroxypropyl)-1,2-propanediamine (II) [16607-73-1]. Further oxypropylation of II at 120.degree. gave a liq. intermediate, which was oxyethylated at 130.degree. to give I with $a + b + c + d = 21.7$ and $m + n + o + p = 10.2$.

IC C08G065-08

CC 36-3 (Plastics Manufacture and Processing)

Section cross-reference(s): 46

ST oxypropylated oxyethylated propanediamine; **detergent**
oxyalkylated propanediamine

IT **Detergents**

(nonionic, oxyethylated-oxypropylated propanediamine)

IT 69522-56-1P

RL: SPN (Synthetic preparation); PREP (Preparation)

(detergents, prepn. of)

IT 69522-56-1P

RL: SPN (Synthetic preparation); PREP (Preparation)

(detergents, prepn. of)

RN 69522-56-1 HCA

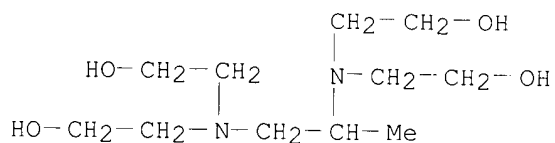
CN Oxirane, methyl-, polymer with oxirane, ether with [(methyl-1,2-ethanediyldinitrilo]tetrakis[propanol] (4:1) (9CI) (CA INDEX NAME)

CM 1

CRN 178667-48-6

CMF C15 H34 N2 O4

CCI IDS



4 (D1-Me)

CM 2

CRN 9003-11-6

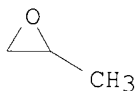
CMF (C3 H6 O . C2 H4 O) x

CCI PMS

CM 3

CRN 75-56-9

CMF C3 H6 O



CM 4

CRN 75-21-8

CMF C2 H4 O



L37 ANSWER 16 OF 16 HCA COPYRIGHT 2003 ACS

77:128497 **Detergent** compositions for **soap** bars. Barnes, Andrew Nicholas M.; Cheng, Wai Ming; Rickards, Tudor; Rosser, David Arthur; Thurairajan, Ponnuswamy (Unilever Ltd.). S. African ZA 7003505 19711125, 53 pp. (English). CODEN: SFXXAB. APPLICATION: ZA 1970-3505 19700525.

AB Addn. of .geq. 15 wt.% of polyethylene oxide quaternary ammonium compds., e.g. R[(OCH₂CH₂)_nOCH₂CH(OH)CH₂N+R₁R₂R₃]_mX-(I) or R₁R₂R₃N+CH₂CO₂(CH₂CH₂O)_zCOCH₂N+R₁R₂R₃ 2X- (R = tallow alc. residue, C₆-22 alkyl, C₆-22 alkoxy, C₆-22 alkylcarbonyloxy, C₆-22 alkylcarbonamido, C₆-22 alkylcarbonyl, propanetriyltrioxy, R₁R₂R₃ = Me, dodecyl, p-dodecylbenzyl, octadecyl, 2-hydroxyethyl, m = 1-3, n = > 3, Z = 4.5-34, X = Cl, Br) to toilet bars provided good after-wash feel and smoother skin. These compds. were also useful as **detergents** and antistatic agents for polymers and textiles. Thus, a mixt. of epichlorohydrin 92.5, tallow alc.-ethylene oxide condensate 874, and N,N-dimethyloctadecylamine 168 g. was heated in the presence of 2 ml. BF₃.Et₂O for 15 min. at 90-95.deg. to give I (R = tallow alc. residue, R₁,R₂ = Me R₃ = octadecyl). Toilet bars contg. the polyethylene oxide quaternary ammonium compds. were preferred in after-wash feel by 24 of 30 skilled assessors when tested against a

- conventional toilet bar.
- CC **46-4** (Surface Active Agents and Detergents)
Section cross-reference(s): 39
- ST polyoxyethylene quaternary ammonium **detergent**; toilet bar
ammonium compd; antistatic agent ammonium compd
- IT Antistatic agents
Detergents
(dialkylbis(polyoxyethylene derivs.) of quaternary ammonium compds.)
- IT Quaternary ammonium compounds, uses and miscellaneous
RL: USES (Uses)
(dialkylbis(polyoxyethylene derivs.), antistatic agents and
detergents)
- IT 1,3-Propanediamine, N-(3-aminopropyl)-N'-[3-(octadecylamino)propyl]-,
reaction products with ethylene oxide, quaternized
Aziridine, homopolymer, reaction products with epichlorohydrin ethylene
oxide derivs.
Aziridine, homopolymer, reaction products with ethylene oxide, quaternized
Ethanol, 2,2',2''-nitrilotris-, reaction products with ethylene oxide,
quaternized
Oxirane, reaction products with polyamines, quaternized
Poly(oxy-1,2-ethanediyl), .alpha.-(1-oxooctadecyl)-.omega.-(3-chloro-2-
hydroxypropoxy)-, reaction products with N-hydroxyethyl
polyethylenimine
Poly(oxy-1,2-ethanediyl), .alpha.-(2-hydroxy-3-pyridiniopropyl)-.omega.-
hydroxy-, chloride, .omega.-tallow alcohol derivs.
Poly(oxy-1,2-ethanediyl), .alpha.-[2-hydroxy-3-
(methyldioctadecylammonio)propyl]-.omega.-hydroxy-, chloride,
.omega.-tallow alcohol derivs.
Poly(oxy-1,2-ethanediyl), .alpha.-[3-(dimethyloctadecylammonio)-2-
hydroxypropyl]-.omega.-hydroxy-, chloride, .omega.-Tallow alcohol
derivs.
Poly(oxy-1,2-ethanediyl), .alpha.-[3-(dodecyldimethylammonio)-2-
hydroxypropyl]-.omega.-hydroxy-, chloride, .omega.-tallow alcohol
derivs.
Poly(oxy-1,2-ethanediyl), .alpha.-[3-[[4-dodecylphenyl)methyl]dimethylamm
onio]-2-hydroxypropyl]-.omega.-hydroxy-, chloride, .omega.-tallow
alcohol derivs.
Poly(oxy-1,2-ethanediyl), .alpha.-[3-[dimethyl[3-[(1-
oxooctadecyl)amino]propyl]ammonio]-2-hydroxypropyl]-.omega.-hydroxy-,
chloride, .omega.-tallow alcohol derivs.
RL: USES (Uses)
(antistatic agents and **detergents**)
- IT 36446-89-6 36446-90-9 36446-91-0 36446-92-1 36446-94-3
36446-95-4 36446-96-5 36447-06-0 36496-06-7 36496-07-8
36496-08-9 36496-13-6 36496-14-7 36496-17-0 36563-57-2
36572-91-5 37314-78-6 37314-79-7 37314-98-0 37314-99-1
37321-48-5 37321-49-6 38719-91-4 38719-92-5 38719-93-6
38814-68-5 38814-69-6 38814-70-9 38814-71-0 38814-72-1
38814-77-6 38814-78-7 38814-85-6 38814-87-8 38814-88-9
38814-94-7 38815-94-0 38815-95-1 38816-52-3 38816-53-4
38891-07-5 38891-08-6 38891-24-6
RL: USES (Uses)
(antistatic agents and **detergents**)
- IT **37321-48-5**
RL: USES (Uses)
(antistatic agents and **detergents**)
- RN 37321-48-5 HCA
- CN Oxirane, methyl-, polymer with oxirane, ether with N,N,N-tris(2-
hydroxyethyl)benzenemethanaminium bromide (9CI) (CA INDEX NAME)

CM 1

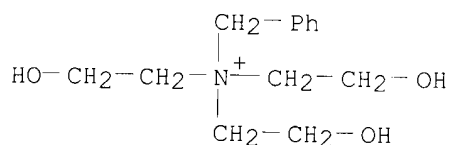
CRN 179915-87-8

CMF C13 H22 N O3 . x (C3 H6 O . C2 H4 O)x

CM 2

CRN 46760-32-1

CMF C13 H22 N O3



CM 3

CRN 9003-11-6

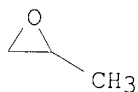
CMF (C3 H6 O . C2 H4 O)x

CCI PMS

CM 4

CRN 75-56-9

CMF C3 H6 O



CM 5

CRN 75-21-8

CMF C2 H4 O



=> d L39 1-6 cbib abs hitind hitstr

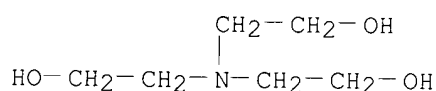
L39 ANSWER 1 OF 6 HCA COPYRIGHT 2003 ACS

129:204458 Skin-mild **detergent** composition for good conditioning effect and sudsing property. Nakagawa, Ryuichi; Yokoi, Kenji (Lion Corp., Japan). Jpn. Kokai Tokkyo Koho JP 10195481 A2 19980728 Heisei, 12 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-358574 19961227.

AB The compn. comprises (a) amido ether sulfate ester and/or amido ether carboxylic acid-type surfactants and (b) guanidine deivs. with specified structures. A compn. comprised dodecanoic acid monoethanolamido polyoxyethylene sulfate ester triethanolamine salt 10, C12H25CONH(CH2)3NHC(:NH)NH2 2, and water to 100%, showing good sudsing property and mildness to hair.

IC ICM C11D001-28

ICS C11D001-66; C11D001-83
 CC 46-6 (Surface Active Agents and Detergents)
 Section cross-reference(s): 62
 ST **detergent** compn conditioning effect sudsing property; guanidine
 deriv **detergent** skin mild; surfactant amido ether ester
detergent
 IT Surfactants
 (anionic, amido ether sulfate ester and/or amido ether carboxylic
 acids; skin-mild **detergent** compn. for good conditioning
 effect and sudsing property)
 IT Polyoxyalkylenes, uses
 RL: BUU (Biological use, unclassified); TEM (Technical or engineered
 material use); BIOL (Biological study); USES (Uses)
 (coco fatty acid isopropanolamide deriv., sulfate ester, sodium salt;
 skin-mild **detergent** compn. for good conditioning effect and
 sudsing property)
 IT Hair preparations
 (conditioners; skin-mild **detergent** compn. for good
 conditioning effect and sudsing property)
 IT **Detergents**
 (laundry; skin-mild **detergent** compn. for good
 conditioning effect and sudsing property)
 IT Bath preparations
Detergents
Shampoos
 (skin-mild **detergent** compn. for good conditioning effect and
 sudsing property)
 IT 113-00-8D, Guanidine, coco fatty acid alkyl amide deriv. 25322-68-3D,
 coco fatty acid isopropanolamide deriv., sulfate ester, sodium salt
 26635-75-6 31886-11-0 32993-45-6 32993-46-7 78125-60-7
 100424-86-0 131151-36-5 136862-13-0 159858-54-5 160920-19-4
 174303-63-0 185330-56-7 211371-95-8 211516-05-1 211516-07-3
 211516-08-4 211516-09-5 211516-10-8 211516-11-9 211516-12-0
 211557-59-4 211557-61-8 211577-91-2 211638-45-8 211638-46-9
 211697-32-4 211697-33-5 **211949-40-5**
 RL: BUU (Biological use, unclassified); TEM (Technical or engineered
 material use); BIOL (Biological study); USES (Uses)
 (skin-mild **detergent** compn. for good conditioning effect and
 sudsing property)
 IT **211949-40-5**
 RL: BUU (Biological use, unclassified); TEM (Technical or engineered
 material use); BIOL (Biological study); USES (Uses)
 (skin-mild **detergent** compn. for good conditioning effect and
 sudsing property)
 RN 211949-40-5 HCA
 CN Ethanol, 2,2',2''-nitrilotris-, compd. with methyloxirane polymer with
 oxirane carboxymethyl 2-[methyl(1-oxoisooctadecyl)amino]ethyl ether (9CI)
 (CA INDEX NAME)
 CM 1
 CRN 102-71-6
 CMF C6 H15 N O3



CM 2

CRN 211949-39-2

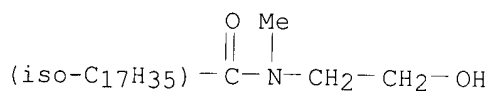
CMF C21 H43 N O2 . (C3 H6 O . C2 H4 O)x . C2 H4 O3

CM 3

CRN 211557-58-3

CMF C21 H43 N O2

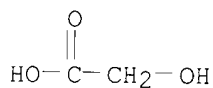
CCI IDS



CM 4

CRN 79-14-1

CMF C2 H4 O3



CM 5

CRN 9003-11-6

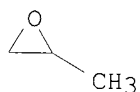
CMF (C3 H6 O . C2 H4 O)x

CCI PMS

CM 6

CRN 75-56-9

CMF C3 H6 O



CM 7

CRN 75-21-8

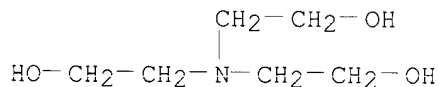
CMF C2 H4 O



L39 ANSWER 2 OF 6 HCA COPYRIGHT 2003 ACS

127:39468 Hair **cleaning** compositions containing esters and anionic sugar derivatives. Fukugaki, Kyoko; Kawai, Yasuhiro (Sunstar Inc., Japan). Jpn. Kokai Tokkyo Koho JP 09095427 A2 19970408 Heisei, 9 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1995-254958 19951002.

- AB Hair **cleaning** compns. contg. 0.01-10%/wt. esters are claimed for preventing flaking with good conditioning effects. Several hair formulations were prepd., and their foaming and flaking-inhibiting effects were tested.
- IC ICM A61K007-075
- CC **62-3** (Essential Oils and Cosmetics)
- IT Carbohydrates, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(anionic; hair **cleaning** compns. contg. esters and anionic sugar derivs.)
- IT Foaming
Hair preparations
(hair **cleaning** compns. contg. esters and anionic sugar derivs.)
- IT Esters, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(hair **cleaning** compns. contg. esters and anionic sugar derivs.)
- IT 4219-48-1, Ethyleneglycol monolaurate 32074-61-6 52738-28-0, Dipropyleneglycol diacetate 53818-14-7, Propyleneglycol diformate 59130-69-7, Hexadecyl 2-Ethylhexanoate 72361-21-8 190208-03-8 **190208-05-0** 190257-22-8 190257-24-0 190339-43-6 190339-44-7
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(hair **cleaning** compns. contg. esters and anionic sugar derivs.)
- IT **190208-05-0**
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(hair **cleaning** compns. contg. esters and anionic sugar derivs.)
- RN 190208-05-0 HCA
- CN .alpha.-D-Glucopyranoside, .beta.-D-fructofuranosyl, hydrogen 2-octenylbutanedioate, compd. with 2,2',2''-nitrilotris[ethanol] (9CI) (CA INDEX NAME)
- CM 1
- CRN 102-71-6
- CMF C6 H15 N O3



CM 2

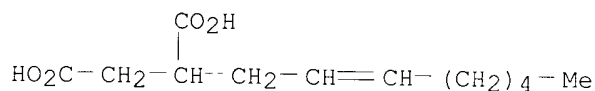
CRN 190208-04-9

CMF C12 H22 O11 . x C12 H20 O4

CM 3

CRN 62568-82-5

CMF C12 H20 O4

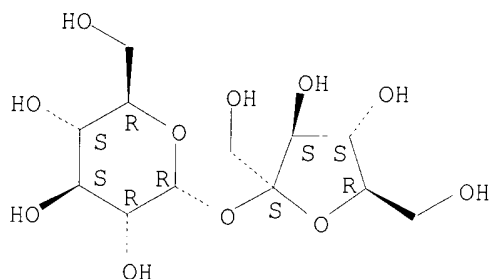


CM 4

CRN 57-50-1

CMF C12 H22 O11

Absolute stereochemistry.



L39 ANSWER 3 OF 6 HCA COPYRIGHT 2003 ACS

121:159774 **Detergent** compositions containing sulfoalkanoate esters with mildness to skin. Okano, Tomomichi; Fukuda, Masahiro; Tanabe, Junko; Ono, Masato; Akabane, Yasuhiro; Takahashi, Hisao; Egawa, Naoyuki; Sakatani, Takenobu; Kanao, Hirofumi (Lion Corp., Japan). PCT Int. Appl. WO 9325646 A1 19931223, 80 pp. DESIGNATED STATES: W: KR, US; RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE. (English). CODEN: PIXXD2. APPLICATION: WO 1993-JP811 19930616. PRIORITY: JP 1992-183144 19920617; JP 1992-352707 19921210; JP 1992-352980 19921210; JP 1992-352981 19921210; JP 1992-352982 19921210; JP 1992-352983 19921210.

AB Surfactants R1CH(SO3M1)CO2(AO)pH, R2CH(SO3M2)CO2(AO)mCOCH(SO3M3)R3, and R4CH(SO3M4)CO2(AO)nR5 (R1-4 = C6-24 alkyl or alkenyl; R5 = C1-4 alkyl; M1-4 = H, cation; AO = oxyalkylene or residue of polyhydric alc.; p, m, n .gtoreq. 1) cause little irritation of skin, have good soly. in water, a low crit micelle concn., and a low Krafft point, and are useful in **detergent** compns. for washing skin, hair, fabrics, dishes, hard surfaces, etc. An aq. compn. for washing skin contained 10.0% polyethylene glycol bis(.alpha.-sulfomyristate) Na salt, 10.0% K myristate, and small amts. of additives.

IC ICM C11D001-28

ICS C11D001-37; C07C303-28

CC 46-6 (Surface Active Agents and Detergents)
Section cross-reference(s): 23, 62

ST sulfoalkanoate ester polyol **detergent** mildness; skin
cleaner sulfoalkanoate ester mildness; polyethylene glycol
 sulfoalkanoate **detergent** mildness; **laundry**
detergent sulfoalkanoate ester; **dishwashing**
detergent sulfoalkanoate ester; **shampoo** surfactant
 sulfoalkanoate ester; glycol sulfoalkanoate ester **detergent**
 mildness

IT **Shampoos**

(surfactants for, with mildness to skin, sulfoalkanoate esters as)

IT **Detergents**

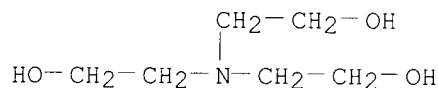
(cleaning compns., surfactants for, with mildness to skin,

sulfoalkanoate esters as)
 IT **Detergents**
 (dishwashing, surfactants for, with mildness to skin,
 sulfoalkanoate esters as)
 IT **Detergents**
 (laundry, surfactants for, with mildness to skin,
 sulfoalkanoate esters as)
 IT 4016-19-7 25322-68-3D, esters with .alpha.-sulfo fatty acids, salts
 26699-61-6 27879-07-8D, Polyethylene glycol monoethyl ether, esters with
 .alpha.-sulfo fatty acids, salts 106392-12-5D, Ethylene oxide-propylene
 oxide block copolymer, esters with .alpha.-sulfo fatty acids, sodium salts
 116214-23-4 144096-67-3 144118-46-7 148782-39-2 150568-61-9
 156494-95-0 156494-96-1 157116-26-2 157116-27-3 157116-28-4
 157116-29-5 157116-30-8 157116-31-9 157116-32-0 157116-33-1
 157116-34-2 157116-35-3 157116-36-4 157116-37-5 157116-38-6
 157116-39-7 157116-40-0 157116-41-1 157116-42-2 157116-43-3
 157116-44-4 157116-45-5 157175-96-7 **157241-14-0**
 157351-18-3 157351-19-4 157351-22-9 157351-32-1 157351-33-2
 157382-11-1 157382-12-2 157478-00-7 157565-99-6 157566-00-2
 RL: TEM (Technical or engineered material use); USES (Uses)
 (surfactants, with mildness to skin)
 IT **157241-14-0**
 RL: TEM (Technical or engineered material use); USES (Uses)
 (surfactants, with mildness to skin)
 RN 157241-14-0 HCA
 CN .alpha.-D-Glucopyranoside, .beta.-D-fructofuranosyl, bis(2-
 sulfohexadecanoate), compd. with 2,2',2''-nitrilotris[ethanol] (1:2) (9CI)
 (CA INDEX NAME)

CM 1

CRN 102-71-6

CMF C6 H15 N O3



CM 2

CRN 157241-13-9

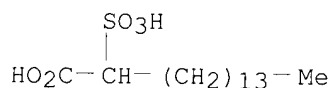
CMF C44 H82 O19 S2

CCI IDS

CM 3

CRN 1782-10-1

CMF C16 H32 O5 S

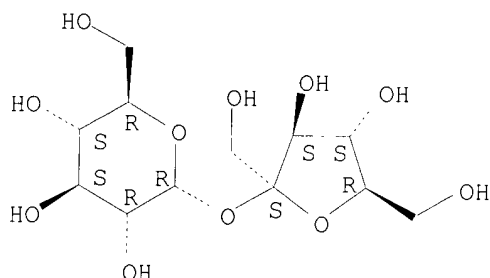


CM 4

CRN 57-50-1

CMF C12 H22 O11

Absolute stereochemistry.



L39 ANSWER 4 OF 6 HCA COPYRIGHT 2003 ACS

117:239476 Clear cosmetic sticks. Brewster, David A.; Kuznitz, Matthew; Faryniarz, Joseph R. (Chesebrough-Pond's USA Co., USA). U.S. US 5128123 A 19920707, 8 pp. (English). CODEN: USXXAM. APPLICATION: US 1991-652962 19910208.

AB A cosmetic stick comprises polyhydric alc. 10-90, **soap** 1-40, alkoxyate copolymer 1-40%, and an aminoalkanol clarifying agent. The alkoxyate copolymer is $[NCH_2CH_2N]_f[(C_2H_4O)_a(C_3H_6O)_h(C_2H_4O)_c(C_3H_4O)_d]_eHg$ (a, b, c, d = 0, 1-200; a + b + c + d > 50; e = 1-4; f = 0, 1; g = 0, 1-4). The stick has a light transmittance of .gtoreq.60% after 1 mo storage at 120.degree.F. A compn. contained polyethylene glycol 61.50, water 27.05, Na stearate 5.50 Pluronic F-127 4.00, Irogasan DP-300 0.30, 2-amino-2-methylpropan-1-ol 0.50, fragrance 1.00, and dye 0.15% by wt.

IC ICM A61K007-32

ICS A61K031-13

NCL 424065000

CC **62-4** (Essential Oils and Cosmetics)IT **Soaps**

RL: BIOL (Biological study)

(cosmetic sticks contg.)

IT 57-55-6, Propylene glycol, biological studies 77-86-1 115-70-8, 2-Amino-2-ethyl-1,3-propanediol 124-68-5, 2-Amino-2-methylpropan-1-ol 822-16-2, Sodium stearate 106392-12-5, Pluronic F-127 **107397-59-1** 110617-70-4 144096-36-6

RL: BIOL (Biological study)

(cosmetic sticks contg.)

IT **107397-59-1**

RL: BIOL (Biological study)

(cosmetic sticks contg.)

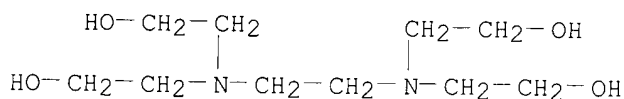
RN 107397-59-1 HCA

CN Oxirane, methyl-, polymer with oxirane, ether with 2,2',2'',2'''-(1,2-ethanediyl)dinitrilo)tetrakis[ethanol] (4:1), block (9CI) (CA INDEX NAME)

CM 1

CRN 140-07-8

CMF C10 H24 N2 O4

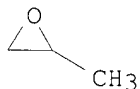


CM 2

CRN 106392-12-5
CMF (C3 H6 O . C2 H4 O)x
CCI PMS

CM 3

CRN 75-56-9
CMF C3 H6 O



CM 4

CRN 75-21-8
CMF C2 H4 O



L39 ANSWER 5 OF 6 HCA COPYRIGHT 2003 ACS

96:74499 **Shampoos** containing phosphate surfactants and fatty acid salts. (Kao Soap Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 56120800 A2 19810922 Showa, 6 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1980-24753 19800229.

AB **Shampoos** are prepd. by mixing 0.1-15 wt.% high-member fatty acid salts and 0.1-10 wt.% ROXP(A)O2B1 (R = C1-22 hydrocarbon, or fatty acid monoamides contg. these hydrocarbons; X = propylene oxides and/or butylene oxides; A = ROX or OB2, B1 and B2 = H, alkali metal, C1-3 alkyl-substituted ammonium, or C1-3 hydroxyalkyl-substituted ammonium). These **shampoos** produce well manageable hair after **shampooing**. For example, a typical compn. consists of triethanolamine lauryl sulfate [139-96-8] 15, triethanolamine laurate [2224-49-9] 2, C4H9O(CH2CH2CH2O)35 (CH2CH2O)3P(OH)O2N(CH2CH2OH)3 [80592-42-3] 2, and water to 100%.

IC C11D001-37

ICI C11D001-37, C11D001-04, C11D001-34

CC 62-3 (Essential Oils and Cosmetics)

ST **shampoo** fatty acid phosphate derivIT **Shampoos**

(fatty acid and phosphate derivs. in)

IT Fatty acids, compounds

RL: BIOL (Biological study)

(salts, **shampoos** contg. phosphate surfactants and)

IT 7664-38-2D, esters 71302-66-4 80445-53-0 80456-78-6 80497-67-2

80497-68-3 80497-69-4 80592-41-2 80592-42-3

80771-96-6

RL: BIOL (Biological study)

(shampoos contg. fatty acid salts and)

IT 139-96-8 2224-49-9 9004-82-4 10124-65-9

RL: BIOL (Biological study)

(shampoos contg. phosphate surfactants and)

IT 80592-42-3 80771-96-6

RL: BIOL (Biological study)
(shampoos contg. fatty acid salts and)

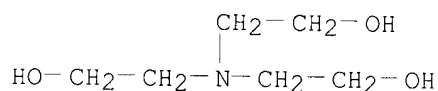
RN 80592-42-3 HCA

CN Ethanol, 2,2',2''-nitrilotris-, compd. with methyloxirane polymer with
oxirane, mono(dihydrogen phosphate), butyl ether (1:1) (9CI) (CA INDEX
NAME)

CM 1

CRN 102-71-6

CMF C6 H15 N O3



CM 2

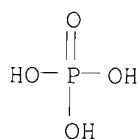
CRN 68855-20-9

CMF C4 H10 O . (C3 H6 O . C2 H4 O)x . H3 O4 P

CM 3

CRN 7664-38-2

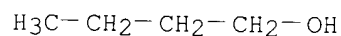
CMF H3 O4 P



CM 4

CRN 71-36-3

CMF C4 H10 O



CM 5

CRN 9003-11-6

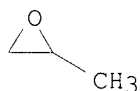
CMF (C3 H6 O . C2 H4 O)x

CCI PMS

CM 6

CRN 75-56-9

CMF C3 H6 O



CM 7

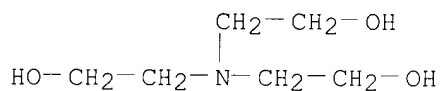
CRN 75-21-8
CMF C2 H4 O



RN 80771-96-6 HCA
CN Ethanol, 2,2',2''-nitrilotris-, compd. with methyloxirane polymer with oxirane mono(dihydrogen phosphate) octadecyl ether (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 102-71-6
CMF C6 H15 N O3

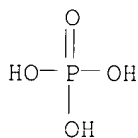


CM 2

CRN 80619-71-2
CMF C18 H38 O . (C3 H6 O . C2 H4 O)x . H3 O4 P

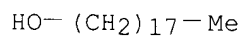
CM 3

CRN 7664-38-2
CMF H3 O4 P



CM 4

CRN 112-92-5
CMF C18 H38 O

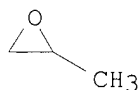


CM 5

CRN 9003-11-6
CMF (C3 H6 O . C2 H4 O)x
CCI PMS

CM 6

CRN 75-56-9
CMF C3 H6 O



CM 7

CRN 75-21-8
CMF C2 H4 O



L39 ANSWER 6 OF 6 HCA COPYRIGHT 2003 ACS

84:169530 Deodorizing action of a complex of usnic acid. Bergerhausen, Heinrich (Orissa Drebing G.m.b.H., Hamburg, Fed. Rep. Ger.). Cosmetics & Toiletries, 91(2), 25-6 (English) 1976. CODEN: CTODIG. ISSN: 0361-4387.

AB A review with 9 refs. discussing the properties of usnic acid-triethanolamine complex (GD Deoactive substance K 1149) [**55648-03-8**] as a safe deodorant in the form of sprays, creams, powders, etc., but not in **soaps**.

CC **62-0** (Essential Oils and Cosmetics)

IT **55648-03-8**

RL: BIOL (Biological study)
(as deodorant)

IT **55648-03-8**

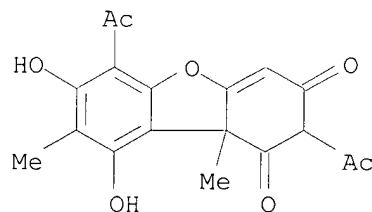
RL: BIOL (Biological study)
(as deodorant)

RN 55648-03-8 HCA

CN 1,3(2H,9bH)-Dibenzofurandione, 2,6-diacetyl-7,9-dihydroxy-8,9b-dimethyl-, compd. with 2,2',2''-nitrilotris[ethanol] (1:1) (9CI) (CA INDEX NAME)

CM 1

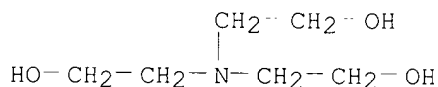
CRN 125-46-2
CMF C18 H16 O7



CM 2

CRN 102-71-6

CMF C6 H15 N O3



=> d L57 1-2 cbib abs hitind hitstr

L57 ANSWER 1 OF 2 HCA COPYRIGHT 2003 ACS

129:204458 Skin-mild **detergent** composition for good conditioning effect and sudsing property. Nakagawa, Ryuichi; Yokoi, Kenji (Lion Corp., Japan). Jpn. Kokai Tokkyo Koho JP 10195481 A2 19980728 Heisei, 12 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-358574 19961227.

AB The compn. comprises (a) amido ether sulfate ester and/or amido ether carboxylic acid-type surfactants and (b) guanidine deivs. with specified structures. A compn. comprised dodecanoic acid monoethanolamido polyoxyethylene sulfate ester triethanolamine salt 10, C12H25CONH(CH2)3NHC(:NH)NH2 2, and water to 100%, showing good sudsing property and mildness to hair.

IC ICM C11D001-28

ICS C11D001-66; C11D001-83

CC **46-6** (Surface Active Agents and Detergents)

Section cross-reference(s): 62

ST **detergent** compn conditioning effect sudsing property; guanidine deriv **detergent** skin mild; surfactant amido ether ester **detergent**

IT Surfactants

(anionic, amido ether sulfate ester and/or amido ether carboxylic acids; skin-mild **detergent** compn. for good conditioning effect and sudsing property)

IT Polyoxyalkylenes, uses

RL: BUU (Biological use, unclassified); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)

(coco fatty acid isopropanolamide deriv., sulfate ester, sodium salt; skin-mild **detergent** compn. for good conditioning effect and sudsing property)

IT Hair preparations

(conditioners; skin-mild **detergent** compn. for good conditioning effect and sudsing property)

IT **Detergents**

(laundry; skin-mild **detergent** compn. for good conditioning effect and sudsing property)

IT Bath preparations

Detergents**Shampoos**

(skin-mild **detergent** compn. for good conditioning effect and sudsing property)

IT 113-00-8D, Guanidine, coco fatty acid alkyl amide deriv. 25322-68-3D, coco fatty acid isopropanolamide deriv., sulfate ester, sodium salt
 26635-75-6 31886-11-0 32993-45-6 32993-46-7 78125-60-7
 100424-86-0 131151-36-5 136862-13-0 159858-54-5 160920-19-4
 174303-63-0 185330-56-7 211371-95-8 211516-05-1 211516-07-3
 211516-08-4 211516-09-5 211516-10-8 211516-11-9 211516-12-0

211557-59-4 211557-61-8 211577-91-2 211638-45-8 211638-46-9
211697-32-4 211697-33-5 **211949-40-5**
RL: BUU (Biological use, unclassified); TEM (Technical or engineered
material use); BIOL (Biological study); USES (Uses)
(skin-mild **detergent** compn. for good conditioning effect and
sudsing property)

IT **211949-40-5**

RL: BUU (Biological use, unclassified); TEM (Technical or engineered
material use); BIOL (Biological study); USES (Uses)
(skin-mild **detergent** compn. for good conditioning effect and
sudsing property)

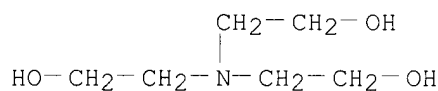
RN 211949-40-5 HCA

CN Ethanol, 2,2',2''-nitrilotris-, compd. with methyloxirane polymer with
oxirane carboxymethyl 2-[methyl(1-oxoisooctadecyl)amino]ethyl ether (9CI)
(CA INDEX NAME)

CM 1

CRN 102-71-6

CMF C6 H15 N O3



CM 2

CRN 211949-39-2

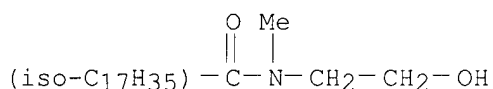
CMF C21 H43 N O2 . (C3 H6 O . C2 H4 O)x . C2 H4 O3

CM 3

CRN 211557-58-3

CMF C21 H43 N O2

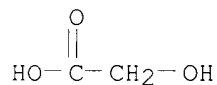
CCI IDS



CM 4

CRN 79-14-1

CMF C2 H4 O3



CM 5

CRN 9003-11-6

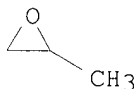
CMF (C3 H6 O . C2 H4 O)x

CCI PMS

CM 6

CRN 75-56-9

CMF C3 H6 O



CM 7

CRN 75-21-8

CMF C2 H4 O



L57 ANSWER 2 OF 2 HCA COPYRIGHT 2003 ACS

104:70563 Wastepaper deinking agents. Koike, Yoshihiro (Nippon Oils and Fats Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 60155794 A2 19850815 Showa, 7 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1984-10888 19840124.

AB The title agents comprise 20-80% C10-20 fatty acids or their **soaps** with 20-80% ROZSO3M (I) [R = C8-22-alkyl, alkenyl, C8-12-alkylphenyl; Z = (C2H4O)m.(C3H6O)n [m + n = 5-30; m/(m + n) = 0.4-0.9]; M = alkali metal, NH4, or alkanolammonium]. Thus, newsprint and handbills were disintegrated at 60.degree. in H2O contg. NaOH 1.0, Na silicate 3.0, 35% H2O2 3.0, lauric acid 0.3, and I [R = C12H25; m + n = 10, m/(n + n) = 0.8; M = Na] 0.3%, dild., and sepd. by flotation to give a pulp slurry. Paper prepd. from the slurry had brightness 55.9% and residual ink no. 52, compared with 47.4% and 160, resp. without I.

IC ICM D21C005-02

CC 43-7 (Cellulose, Lignin, Paper, and Other Wood Products)

Section cross-reference(s): **46**, 60

IT Fatty acids, uses and miscellaneous

Soaps

RL: USES (Uses)

(deinking agents contg., for wastepaper)

IT 57-10-3, uses and miscellaneous 57-11-4, uses and miscellaneous

112-80-1, uses and miscellaneous 143-19-1 544-63-8, uses and

miscellaneous 629-25-4 2437-23-2 10124-65-9 65423-84-9

83138-50-5 99752-71-3 99752-72-4 **100180-10-7**

RL: USES (Uses)

(deinking agents contg., for wastepaper)

IT **100180-10-7**

RL: USES (Uses)

(deinking agents contg., for wastepaper)

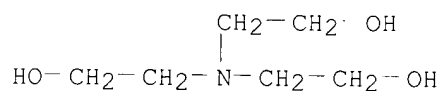
RN 100180-10-7 HCA

CN Ethanol, 2,2',2''-nitrilotris-, compd. with methyloxirane polymer with oxirane, mono(hydrogen sulfate), dodecyl ether (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 102-71-6

CMF C6 H15 N O3



CM 2

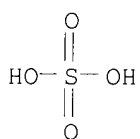
CRN 68439-26-9

CMF C12 H26 O . (C3 H6 O . C2 H4 O)x . H2 O4 S

CM 3

CRN 7664-93-9

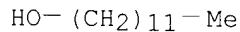
CMF H2 O4 S



CM 4

CRN 112-53-8

CMF C12 H26 O



CM 5

CRN 9003-11-6

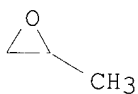
CMF (C3 H6 O . C2 H4 O)x

CCI PMS

CM 6

CRN 75-56-9

CMF C3 H6 O



CM 7

CRN 75-21-8

CMF C2 H4 O



=> d L53 1,5,10,15,20,25,30,35,40,45,50,52,54,57,60-63 cbib abs hitind hitstr

L53 ANSWER 1 OF 68 HCA COPYRIGHT 2003 ACS

137:371757 Compositions and articles for effective deposition of perfume in the wash. Welch, Robert Gary; Dihora, Jiten Odhavji; Wahl, Errol Hoffman; Dufton, Daniel James; Gibson, Malcolm; Johnston, Grant Gordon; Patton, Andrew Brian Greenaway; Ridyard, Mark William; Sayers, Edward; Schroeder, Timothy James; Trinh, Toan; Diersing, Steven Louis; York, David William; Liu, Zaiyou; Finley, Kristin Marie (The Procter & Gamble Company, USA). PCT Int. Appl. WO 2002090481 A1 20021114, 99 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2002-US13812 20020501. PRIORITY: US 2001-PV288767 20010504; US 2002-PV352808 20020130.

AB The title compns. will rapidly dispense a unitized amt. of .gtoreq.1 selected fabric care agents to a wash and/or rinse bath soln. during the **laundering** process under a variety of conditions such that the fabric care additive is effectively deposited on the fabrics. Specifically, the compns. include a hydratable material, preferably effervescing materials, perfume particles and optional materials. The perfume particles are perfume combined with an inorg. carrier, preferably zeolite particles having a min. surface area. The deposition of the perfume particles on fabrics during washing and/or rinsing provides a controlled release of the perfume components from the treated fabrics for up to .gtoreq.2 wk. The retention of the perfume on the carrier when dispensed in an aq. soln. is improved.

IC ICM C11D003-50
ICS C11D017-04

CC **46-5** (Surface Active Agents and Detergents)

ST effervescent perfume **detergent** compn deposition fabric; perfume zeolite carrier particle **detergent** additive

IT Polyoxyalkylenes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(binder; **laundry** additive compn. contg. perfumed particles and hydrating material for dispensing in the wash or rinse)

IT **Detergents**
(granular, tablets; **laundry** additive compn. contg. perfumed particles and hydrating material for dispensing in the wash or rinse)

IT **Detergents**
Fabric softeners
Packaging materials
Perfumes
Sandalwood (Santalum album)
(**laundry** additive compn. contg. perfumed particles and hydrating material for dispensing in the wash or rinse)

IT X zeolites
Y zeolites
Zeolite 13X
RL: TEM (Technical or engineered material use); USES (Uses)
(perfume carrier; **laundry** additive compn. contg. perfumed particles and hydrating material for dispensing in the wash or rinse)

IT 25322-68-3, Polyethylene glycol **205037-45-2**

RL: TEM (Technical or engineered material use); USES (Uses)
(binder; **laundry** additive compn. contg. perfumed particles
and hydrating material for dispensing in the wash or rinse)

IT 77-92-9, Citric acid, uses 144-55-8, Sodium bicarbonate, uses
497-19-8, Sodium carbonate, uses 9005-25-8, Starch, uses 66829-29-6,
Hicap 100

RL: TEM (Technical or engineered material use); USES (Uses)
(effervescent contg.; **laundry** additive compn. contg. perfumed
particles and hydrating material for dispensing in the wash or rinse)

IT 77-53-2, Cedrol 77-54-3, Cedryl acetate 77-76-9, Acetone dimethyl
ketal 77-83-8, Ethyl methylphenyl glycidate 77-90-7, Tributyl
acetylcitrate 78-35-3, Linalyl isobutyrate 78-36-4, Linalyl butyrate
78-37-5, Linalyl cinnamate 78-70-6, Linalool 79-76-5, .gamma.-Ionone
79-77-6 79-78-7 80-27-3 80-54-6 81-14-1, Musk ketone 85-91-6,
Methyl-N-methyl anthranilate 87-20-7, Isoamyl salicylate 87-25-2,
Ethyl anthranilate 87-44-5, Caryophyllene 87-55-8 88-41-5,
2-tert-Butyl cyclohexyl acetate 89-43-0, Hydroxycitronellal
methylantranilate 89-46-3, Menthyl salicylate 89-48-5, dl-Menthyl
acetate 89-82-7, Pulegone 90-17-5, Trichloromethylphenylcarbinyl
acetate 91-51-0 91-64-5, Coumarin 91-87-2 93-04-9 93-08-3,
.beta.-Methyl naphthyl ketone 93-60-7, Methyl nicotinate 93-92-5,
Methyl phenyl carbinyl acetate 94-41-7, Benzylidene acetophenone
94-47-3, Phenyl ethyl benzoate 94-48-4, Geranyl benzoate 97-53-0,
Eugenol 97-54-1, Isoeugenol 97-89-2, Citronellyl isobutyrate
101-48-4, Phenylacetaldehyde dimethyl acetal 101-49-5,
Phenylacetaldehyde ethylene glycol acetal 101-81-5, Diphenylmethane
101-84-8, Diphenyl oxide 101-86-0, Hexylcinnamic aldehyde 102-20-5,
2-Phenylethyl phenyl acetate 102-22-7, Geranyl phenylacetate 103-07-1,
Dimethyl phenylethyl carbinyl acetate 103-26-4, Methyl cinnamate
103-36-6, Ethyl cinnamate 103-37-7, Benzyl butyrate 103-38-8, Benzyl
iso-valerate 103-54-8, Cinnamyl acetate 103-95-7 104-46-1, Anethole
104-54-1, Cinnamic alcohol 104-65-4, Cinnamyl formate 104-67-6,
.gamma.-Undecalactone 105-57-7, Acetaldehyde diethyl acetal 105-82-8
105-86-2, Geranyl formate 105-87-3, Geranyl acetate 105-90-8, Geranyl
propionate 105-95-3, Ethylene brassylate 106-02-5,
15-Hydroxypentadecanoic acid lactone 106-23-0, Citronellal 106-25-2,
Nerol 106-29-6, Geranyl butyrate 108-84-9 109-20-6, Geranyl
isovalerate 109-29-5, Hexadecanolide 112-12-9, Methyl nonyl ketone
112-14-1, n-Octyl acetate 112-45-8, Undecylenic aldehyde 112-54-9,
Lauric aldehyde 115-71-9, .alpha.-Santalol 115-95-7, Linalyl acetate
115-99-1, Linalyl formate 118-55-8, Phenyl salicylate 118-58-1, Benzyl
salicylate 119-61-9, Benzophenone, uses 120-24-1, Isoeugenyl
phenylacetate 120-45-6, Methyl phenyl carbinyl propionate 120-51-4,
Benzyl benzoate 120-57-0, Heliotropin 120-72-9, Indole, uses
121-32-4, Ethyl vanillin 121-33-5, Vanillin 122-40-7, Amylcinnamic
aldehyde 122-57-6, Benzylidene acetone 122-69-0, Cinnamyl cinnamate
122-78-1, Phenylacetaldehyde 123-11-5, P-Anisic aldehyde, uses
123-68-2, Allyl caproate 125-12-2, Isobornyl acetate 126-64-7, Linalyl
benzoate 126-84-1, Acetone diethyl ketal 127-41-3 127-51-5,
.alpha.-Isomethylionone 134-09-8, Menthyl anthranilate 134-20-3,
Methyl anthranilate 134-28-1, Guaiyl acetate 141-12-8, Neryl acetate
141-13-9, Adoxal 141-14-0, Citronellyl propionate 142-19-8, Allyl
heptoate 144-39-8, Linalyl propionate 145-39-1, Musk tibetene
151-05-3 475-03-6 532-08-1 583-04-0, Allyl benzoate 607-91-0,
Myristicin 620-82-6 622-45-7, Cyclohexyl acetate 623-84-7, Propylene
glycol diacetate 625-16-1, tert-Amyl acetate 637-78-5, Isopropyl
propionate 692-86-4 710-04-3, .delta.-Undecalactone 713-95-1,
.delta.-Dodecalactone 774-48-1, Benzaldehyde diethyl acetal 868-57-5,
Methyl 2-methylbutyrate 923-69-3, Citronellal dimethyl acetal 936-51-6
947-05-7, Dodecalactone 999-40-6, Neryl butyrate 1079-01-2, Myrtenyl

acetate 1118-27-0, Linalyl isovalerate 1118-39-4, Myrcenyl acetate 1125-88-8, Benzaldehyde dimethyl acetal 1129-47-1, Cyclohexyl isobutyrate 1142-85-4 1191-16-8, Prenyl acetate 1192-62-7 1319-88-6, Benzaldehyde glyceryl acetal 1333-58-0, Isobutylquinoline 1334-86-7 1334-90-3 1334-91-4 1335-46-2, Methyl ionone 1335-66-6, Iso cyclo citral 1405-92-1, Cedrenyl acetate 1551-41-3 1551-43-5, Cyclohexyl valerate 1551-44-6, Cyclohexyl butyrate 1725-01-5, 1,8-Dioxacycloheptadecan-9-one 1866-31-5, Allyl cinnamate 2049-96-9, Amyl benzoate 2050-08-0, Amyl salicylate 2051-50-5, 2-Octanyl acetate 2051-78-7, Allyl butyrate 2114-33-2 2153-26-6 2153-28-8 2186-92-7, Anisaldehyde-dimethyl acetal 2305-05-7, .gamma.-Dodecalactone 2311-46-8, Isopropyl caproate 2311-59-3, Isopropyl caprate 2345-26-8, Geranyl isobutyrate 2403-58-9 2412-73-9, Cyclohexyl benzoate 2442-10-6 2497-18-9, trans-2-Hexenyl acetate 2550-26-7, Benzyl acetone 2568-25-4, Benzaldehyde propylene glycol acetal 2623-23-6 2630-39-9, Methyl dihydrojasmonate 2705-87-5, Allylcyclohexane propionate 3301-94-8, .delta.-Nonalactone 3460-44-4 3460-45-5 3460-46-6 3487-99-8, Amyl cinnamate 3738-00-9 4316-37-4, Acetophenone diethyl ketal 4351-54-6, Cyclohexyl formate 4364-06-1, Cinnamic aldehyde dimethyl acetal 4395-92-0, P-Isopropylphenylacetaldehyde 4436-30-0 4728-82-9, Allylcyclohexane acetate 4864-61-3 5451-60-5 5451-69-4, Thymyl propionate 5454-26-2 5458-59-3 5468-06-4 5726-19-2, 2-Methyl cyclohexyl acetate 5986-55-0, Patchouli alcohol 6061-96-7 6189-76-0, Isobornyl valerate 6222-35-1, Cyclohexyl propionate 6243-10-3, Cyclohexyl caproate 6259-76-3, Hexyl salicylate 6270-03-7, Phenyl glycol diacetate 6284-35-1, Menthyl benzoate 6314-97-2, Phenylacetaldehyde diethyl acetal 6413-10-1, Ethyl 2-methyl-1,3-dioxolane-2-acetate 6707-60-4, 1,6-Dioxacycloheptadecan-7-one 7143-69-3, Linalyl phenylacetate 7148-78-9 7149-23-7 7149-26-0, Linalyl anthranilate 7149-27-1 7149-28-2 7149-29-3 7452-79-1, Ethyl-2-methyl butyrate 7491-02-3 7492-39-9 7492-66-2, Citral diethyl acetal 7493-57-4 7493-63-2, Allyl anthranilate 7493-65-4, Allylcyclohexane butyrate 7493-72-3, Allyl nonanoate 7493-78-9 7493-79-0 7534-40-9 7549-37-3, Citral dimethyl acetal 7643-61-0, cis-Ocimenyl acetate 7717-62-6 7756-96-9, Butyl anthranilate 7774-44-9, Cyclohexyl iso-valerate 7774-65-4 7774-96-1 7775-38-4 7775-39-5 7779-16-0, Cyclohexyl anthranilate 7779-17-1, Cyclohexyl cinnamate 7779-23-9 7780-06-5, Isopropyl cinnamate 10024-64-3 10031-71-7 10031-96-6, Eugenyl formate 10032-00-5, Geranyl acetoacetate 10032-02-7, Geranyl caproate 10042-36-1 10058-43-2, Dimethyl benzyl carbinyl formate 10108-80-2, Propylene glycol dipropionate 10402-33-2, Eugenyl phenyl acetate 10402-47-8, Geranyl valerate

RL: TEM (Technical or engineered material use); USES (Uses)

(laundry additive compn. contg. perfumed particles and hydrating material for dispensing in the wash or rinse)

IT 10402-48-9 10444-50-5, Citral propylene glycol acetal 10471-96-2 10484-09-0, Allyl salicylate 10500-10-4 10588-15-5, Isopulegyl formate 13002-09-0 13171-00-1, 4-Acetyl-6-tert-butyl-1,1-dimethyl indane 13358-49-1 13586-68-0 13851-11-1, Fenchyl acetate 14481-52-8 14481-55-1 14901-07-6 14936-67-5 15323-35-0 16409-46-4, Menthyl iso-valerate 16849-98-2, Cyclohexyl thioglycolate 17283-55-5 17672-88-7, Iso-apiole 18127-01-0, 3-(4-tert-Butylphenyl)propanal 18362-97-5 18846-83-8 21145-77-7, 7-Acetyl-1,1,3,4,4,6-hexamethyl tetralin 22597-23-5, 4-Methyl cyclohexyl acetate 22629-49-8, 2-Tridecenitrile 23696-85-7 23726-91-2 23726-93-4 25485-88-5, Cyclohexyl salicylate 26171-78-8 27417-37-4, Gamma-Methylionone 28219-61-6 28267-32-5 28645-51-4, Oxacycloheptadec-10-en-2-one 29350-73-0, Cadinene 29548-30-9, Farnesyl acetate 29605-88-7, Allethrolone 29657-73-6 29895-73-6 30168-23-1 30390-50-2,

4-Decenal 31795-37-6 32210-23-4, 4-tert-Butyl cyclohexyl acetate
32539-78-9, Oxacyclohexadec-12-en-2-one 32665-23-9, Isopropyl
iso-valerate 34997-46-1 36809-53-7, 3-Nonenyl acetate 37609-25-9,
5-Cyclohexadecen-1-one 38285-49-3, 5-Methyl-3-butyltetrahydropyran-4-yl
acetate 39282-36-5, Undecalactone 39900-38-4, Cedryl formate
42288-75-5, Cyclohexyl phenylacetate 43052-87-5, .alpha.-Damascone
51317-10-3, Eudesmyl acetate 53398-80-4, trans-2-Hexenyl propionate
53398-83-7, trans-2-Hexenyl butyrate 53398-86-0 53496-15-4
54140-14-6 54464-57-2 54982-83-1, Ethylene dodecane dioate
55599-63-8, Iralia 56001-43-5, Nerolidyl acetate 56922-74-8
56961-72-9 56961-73-0 56973-85-4 57082-24-3, Caryophyllene acetate
57378-68-4 57576-09-7, Isopulegyl acetate 57856-81-2, Allyl caprate
58985-18-5, Dihydroterpinyl acetate 59354-71-1 60031-93-8 60763-40-8
61573-91-9 61949-23-3 62563-80-8, Vetiveryl acetate 63156-02-5
63449-64-9 64480-03-1, Menthyl isobutyrate 65405-77-8, cis-3-Hexenyl
salicylate 65416-18-4 65416-19-5 67634-12-2 67785-77-7, Dimethyl
benzyl carbonyl propionate 67800-80-0 67801-20-1, Ebanol 67801-42-7
67874-72-0 67874-81-1, Cedramber 67952-57-2 68039-29-2 68039-48-5
68039-49-6, 2,4-Dimethyl-3-cyclohexenecarboxaldehyde 68133-78-8
68140-52-3 68227-51-0 70159-92-1 71605-84-0 71617-11-3
71617-16-8, Myrcenyl formate 71648-34-5 71648-36-7 71832-76-3
72797-29-6 72927-84-5 73019-15-5 74024-73-0 74356-34-6
74483-19-5 76842-49-4, Frutene 80111-68-8, Damascone 80858-47-5
84271-96-5 84607-57-8 86143-85-3 87731-18-8, Carbonic acid
4-cycloocten-1-yl methyl ester 88642-03-9, Cyclohexadecenone
88969-41-9, Dihydromyrcenyl acetate 93983-63-2 94134-88-0 94159-33-8
97746-88-8 99992-43-5 100330-45-8 101830-66-4 102709-98-8
103614-86-4 103983-14-8 107898-54-4, 3,3-Dimethyl-5-(2,2,3-trimethyl-3-
cyclopenten-1-yl)-4-penten-2-ol 110378-64-8 116325-90-7 118562-73-5,
2-Cyclododecylpropanol 119486-40-7 124899-75-8 130066-44-3, Lyrall
141473-42-9 141553-01-7, Menthyl propionate 141809-65-6 144677-97-4
149217-17-4 151259-41-5 171102-41-3, Flor acetate 177537-03-0,
Geranyl anthranilate 177696-82-1 177771-82-3, Ambroxan 182064-73-9
190733-77-8 194986-83-9 238079-87-3, Herbavert 337308-72-2
345288-70-2 346708-56-3, Methyl cedrylone 380335-12-6 380366-79-0,
Cyclogalbanate 435275-03-9, Calone 449203-72-9, Citrathal
475285-45-1 475285-46-2 475285-47-3 475285-48-4 475285-49-5
475285-50-8 475285-51-9 475285-52-0 475285-53-1 475285-54-2
475285-55-3 475285-56-4 475285-57-5 475285-58-6 475285-59-7
475285-60-0 475285-61-1 475285-62-2 475285-63-3 475285-64-4
475285-65-5 475285-67-7 475285-68-8 475285-69-9 475501-46-3
475501-47-4 475501-48-5 475501-50-9 475501-51-0 475501-52-1
475501-54-3 475501-56-5 475501-58-7 475501-60-1 475501-61-2
475501-62-3 475501-63-4

RL: TEM (Technical or engineered material use); USES (Uses)
(laundry additive compn. contg. perfumed particles and
hydrating material for dispensing in the wash or rinse)

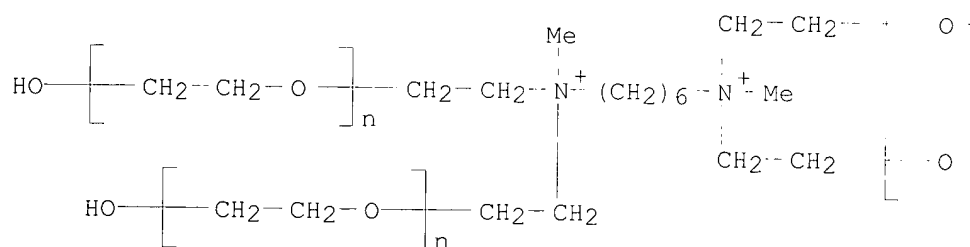
IT 205037-45-2

RL: TEM (Technical or engineered material use); USES (Uses)
(binder; laundry additive compn. contg. perfumed particles
and hydrating material for dispensing in the wash or rinse)

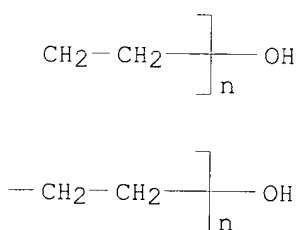
RN 205037-45-2 HCA

CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.,.alpha.,.alpha.''-[1,6-
hexanediylbis[(methylnitrilio)di-2,1-ethanediyl]]tetrakis[.omega.-hydroxy-
(9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L53 ANSWER 5 OF 68 HCA COPYRIGHT 2003 ACS

135:212625 **Laundry detergent** compositions comprising

zwitterionic polyamines and xyloglucanase. Ghosh, Chanchal Kumar (Procter + Gamble Company, USA). PCT Int. Appl. WO 2001062885 A1 20010830, 59 pp.

DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2.

APPLICATION: WO 2001-US5534 20010221. PRIORITY: US 2000-PV184367 20000223.

AB The comps. of the present invention comprise (a) .apprx. 0.01% zwitterionic polyamine having a polyamine backbone comprising .gtoreq.2 amino units wherein .gtoreq.1 amino units is quaternized and .gtoreq.1 amino unit is substituted by one or more moieties capable of having an anionic charge wherein the no. of amino unit substitutions which comprise said anionic moiety is .ltoreq. the no. of quaternized backbone amino units; (b) .apprx. 0.00005% xyloglucanase enzyme; (c) .apprx. 0.5-50% surfactant system comprising .apprx.10-99% nonionic surfactant, .apprx. 1-90% anionic surfactant; and optionally .apprx.1-50% deterative surfactant selected from the group consisting of cationic surfactants, zwitterionic surfactants, ampholytic surfactants, and mixts. and the balance carriers and adjunct ingredients. The compn. solves the problem of soil and dirt becoming entrained in cellulosic material loosened and removed from fabric during washing and the soil being entrapped by the cellulosic material and re-deposited onto the fabric surface.

IC ICM C11D003-386

ICS C11D003-37

CC **46-5** (Surface Active Agents and Detergents)ST **laundry detergent** zwitterionic polyamine

- xyloglucanase; surfactant enzyme polyamine **laundry detergent** manuf
- IT Surfactants
(amphoteric; **laundry detergent** compns. comprising zwitterionic polyamines and xyloglucanase which prevent the redeposition of soil onto the surface during washing)
- IT Surfactants
(anionic; **laundry detergent** compns. comprising zwitterionic polyamines and xyloglucanase which prevent the redeposition of soil onto the surface during washing)
- IT Surfactants
(cationic; **laundry detergent** compns. comprising zwitterionic polyamines and xyloglucanase which prevent the redeposition of soil onto the surface during washing)
- IT Bacillus amyloliquefaciens
(**laundry detergent** compns. comprising zwitterionic polyamines and xyloglucanase which prevent the redeposition of soil onto the surface during washing)
- IT Enzymes, uses
Quaternary ammonium compounds, uses
RL: MOA (Modifier or additive use); USES (Uses)
(**laundry detergent** compns. comprising zwitterionic polyamines and xyloglucanase which prevent the redeposition of soil onto the surface during washing)
- IT **Detergents**
(**laundry; laundry detergent** compns. comprising zwitterionic polyamines and xyloglucanase which prevent the redeposition of soil onto the surface during washing)
- IT Surfactants
(nonionic; **laundry detergent** compns. comprising zwitterionic polyamines and xyloglucanase which prevent the redeposition of soil onto the surface during washing)
- IT Amines, uses
RL: MOA (Modifier or additive use); USES (Uses)
(polyamines, nonpolymeric, zwitterionic; **laundry detergent** compns. comprising zwitterionic polyamines and xyloglucanase which prevent the redeposition of soil onto the surface during washing)
- IT Surfactants
(zwitterionic; **laundry detergent** compns. comprising zwitterionic polyamines and xyloglucanase which prevent the redeposition of soil onto the surface during washing)
- IT 9000-92-4, Amylase
RL: MOA (Modifier or additive use); USES (Uses)
(Duramyl and Natalase; **laundry detergent** compns. comprising zwitterionic polyamines and xyloglucanase which prevent the redeposition of soil onto the surface during washing)
- IT 9012-54-8, Carezyme
RL: MOA (Modifier or additive use); USES (Uses)
(Endo A; **laundry detergent** compns. comprising zwitterionic polyamines and xyloglucanase which prevent the redeposition of soil onto the surface during washing)
- IT **357293-18-6DP**, sulfated, sodium salts
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(**laundry detergent** compns. comprising zwitterionic polyamines and xyloglucanase which prevent the redeposition of soil onto the surface during washing)
- IT 70914-37-3P **357293-18-6P**
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT

(Reactant or reagent)

(laundry detergent compns. comprising zwitterionic polyamines and xyloglucanase which prevent the redeposition of soil onto the surface during washing)

IT 9000-90-2, Termamyl 9001-62-1, Lipolase 9001-92-7, Protease
9003-99-0, Peroxidase 51377-41-4, Cutinase 60748-69-8, Mannanase
76901-10-5, Xyloglucanase

RL: MOA (Modifier or additive use); USES (Uses)

(laundry detergent compns. comprising zwitterionic polyamines and xyloglucanase which prevent the redeposition of soil onto the surface during washing)

IT 75-09-2, Methylene chloride, reactions 75-21-8, Ethylene oxide, reactions 143-23-7, Bis(hexamethylene)triamine

RL: RCT (Reactant); RACT (Reactant or reagent)

(laundry detergent compns. comprising zwitterionic polyamines and xyloglucanase which prevent the redeposition of soil onto the surface during washing)

IT 357293-18-6DP, sulfated, sodium salts

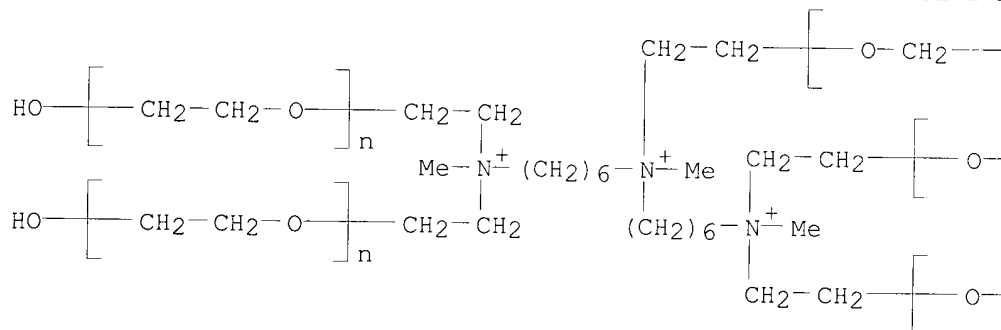
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(laundry detergent compns. comprising zwitterionic polyamines and xyloglucanase which prevent the redeposition of soil onto the surface during washing)

RN 357293-18-6 HCA

CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, ether with N-[6-[bis(2-hydroxyethyl)methylammonio]hexyl]-N,N',N'-tris(2-hydroxyethyl)-N,N'-dimethyl-1,6-hexanediaminium trichloride (5:1) (9CI) (CA INDEX NAME)

PAGE 1-A



● 3 Cl⁻

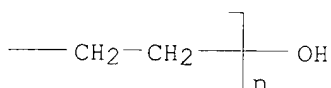
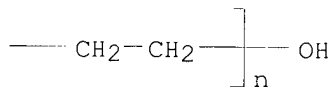
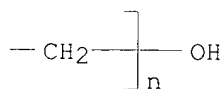
Charles,

That of records for this application were indexed like this $(\text{CH}_2 - \text{CH}_2 - \text{O})_n$.

The ethoxy being polymer.

John

PAGE 1-B



IT 357293-18-6P

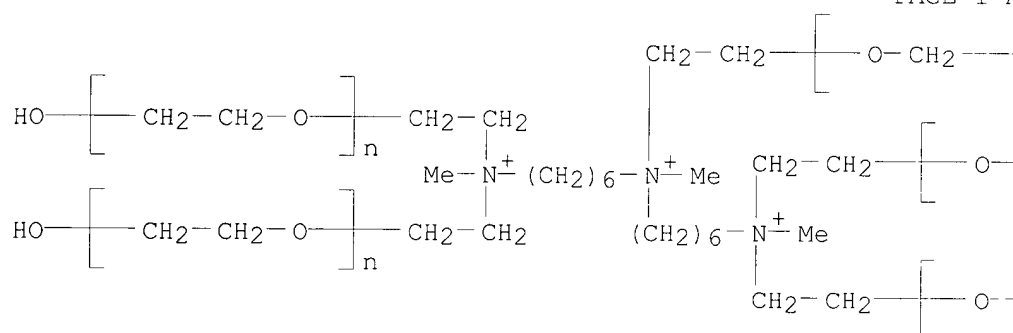
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(laundry detergent compns. comprising zwitterionic polyamines and xyloglucanase which prevent the redeposition of soil onto the surface during washing)

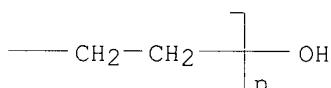
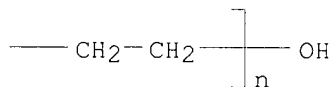
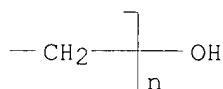
RN 357293-18-6 HCA

CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, ether with N-[6-{bis(2-hydroxyethyl)methylammonio]hexyl]-N,N',N'-tris(2-hydroxyethyl)-N,N'-dimethyl-1,6-hexanediaminium trichloride (5:1) (9CI) (CA INDEX NAME)

PAGE 1-A

● 3 Cl⁻

PAGE 1-B



L53 ANSWER 10 OF 68 HCA COPYRIGHT 2003 ACS

133:179376 Hard surface **cleaning** and disinfecting compositions.

Smialowicz, Dennis Thomas; Cheung, Tak Wai (Reckitt & Colman Inc., USA).

PCT Int. Appl. WO 2000049127 A1 20000824, 43 pp. DESIGNATED STATES: W:

AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN:

PIXXD2. APPLICATION: WO 2000-GB464 20000214. PRIORITY: GB 1999-3478 19990217.

AB Hard surface **cleaning** and disinfecting compns. comprise a synergistic combination of a quaternary ammonium compd. and an alkoxyated quaternary ammonium compd. The hard surface **cleaning** and disinfecting compns. provide excellent **cleaning** and disinfection of hard surfaces.

IC ICM C11D003-48

ICS C11D001-62; C11D001-645; C11D003-20; A01N033-12

CC **46-6** (Surface Active Agents and Detergents)ST alkoxyated quaternary ammonium compd disinfectant **cleaning** compn

IT Quaternary ammonium compounds, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(alkoxyated; hard surface **cleaning** and disinfecting compns.)IT **Detergents**

Disinfectants

(hard surface **cleaning** and disinfecting compns.)

IT Quaternary ammonium compounds, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(hard surface **cleaning** and disinfecting compns.)IT **28724-32-5**, ETHOQUAD 18/25 169592-09-0, BTC-8358

RL: TEM (Technical or engineered material use); USES (Uses)

(hard surface **cleaning** and disinfecting compns.)IT **28724-32-5**, ETHOQUAD 18/25

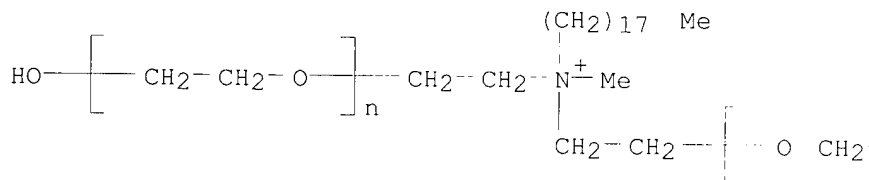
RL: TEM (Technical or engineered material use); USES (Uses)

(hard surface **cleaning** and disinfecting compns.)

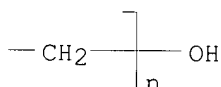
RN 28724-32-5 HCA

CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(methyloctadecyliminio)di-2,1-ethanediyl]bis[.omega.-hydroxy-, chloride (9CI) (CA INDEX NAME)

PAGE 1-A

● Cl⁻

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L53 ANSWER 15 OF 68 HCA COPYRIGHT 2003 ACS

127:36247 **Detergent** compositions containing polyalkoxylated amine foam stabilizers. Crutcher, Terry; Krogh, James A. (Tomah Products, Inc., USA). PCT Int. Appl. WO 9716514 A1 19970509, 44 pp. DESIGNATED STATES: W: CA, MX; RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE. (English). CODEN: PIXXD2. APPLICATION: WO 1996-US17831 19961030. PRIORITY: US 1995-550299 19951030.

AB RR1(CH2CH2CH2)nN[(CHR2CH2O)xH][(CHR3CH2O)yH] [R = C4-22 alkyl, substituted C7-22 aryloxy, C4-22 alkoxy; R1 = (CHR4CH2O)z, R2, R3, R4 = H or Me; n = 0 or 1, x, y = 0-20, 2 < x + y .ltoreq. 20] are useful as foam stabilizers in liq. **dishwashing detergents**.

IC ICM C11D001-75

ICS C11D001-86; C11D001-94; C11D003-30

CC **46-6** (Surface Active Agents and Detergents)

ST polyalkoxylated amine foam stabilizer **dishwashing detergent**

IT Polyoxyalkylenes, uses

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(alkylamine derivs.; **detergent** compns. contg. polyalkoxylated amine foam stabilizers)

IT Amines, uses

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(coco alkyl, polyethoxylated; **detergent** compns. contg. polyalkoxylated amine foam stabilizers)

IT Stabilizing agents

(**detergent** compns. contg. polyalkoxylated amine foam stabilizers)

IT **Detergents**

Detergents

(**dishwashing**, liq.; **detergent** compns. contg. polyalkoxylated amine foam stabilizers)

IT Amines, uses

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(soya alkyl, polyethoxylated; **detergent** compns. contg. polyalkoxylated amine foam stabilizers)

IT Amines, uses

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(tallow alkyl, polyethoxylated; **detergent** compns. contg. polyalkoxylated amine foam stabilizers)

IT 109-76-2D, 1,3-Propanediamine, ethoxylated, tallow derivs. 25322-68-3D, alkylamine derivs. 170516-50-4 190834-55-0 **190834-57-2** 190834-58-3 **190834-59-4** 190916-49-5 190916-50-8D, ethoxylated

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(**detergent** compns. contg. polyalkoxylated amine foam stabilizers)

IT **190834-57-2 190834-59-4**

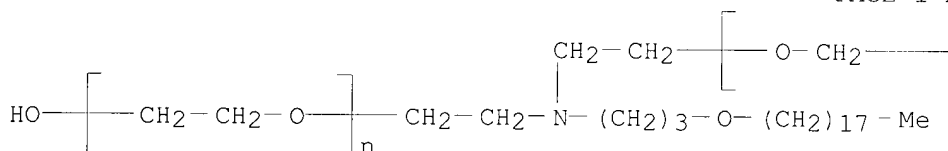
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(**detergent** compns. contg. polyalkoxylated amine foam stabilizers)

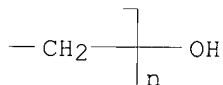
RN 190834-57-2 HCA

CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[[[3-(octadecyloxy)propyl]imino]di-2,1-ethanediyl]bis[.omega.-hydroxy- (9CI) (CA INDEX NAME)]

PAGE 1-A



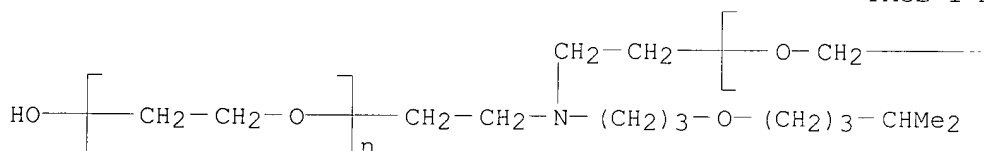
PAGE 1-B



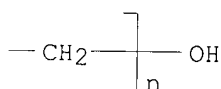
RN 190834-59-4 HCA

CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[[[3-[(4-methylpentyl)oxy]propyl]imino]di-2,1-ethanediyl]bis[.omega.-hydroxy- (9CI) (CA INDEX NAME)]

PAGE 1-A

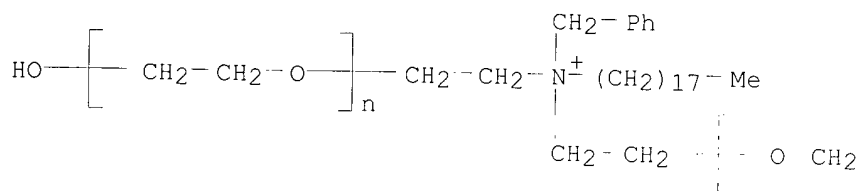


PAGE 1-B

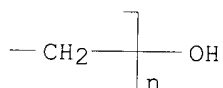


- L53 ANSWER 20 OF 68 HCA COPYRIGHT 2003 ACS
- 124:11398 Anionic-cationic surfactant mixtures for removing oily stains from fabrics. Mehreteab, Ammanuel; Loprest, Frank J. (Colgate Palmolive Co., USA). U.S. US 5441541 A 19950815, 43 pp. Cont. of U.S. Ser. No.382, 127, abandoned. (English). CODEN: USXXAM. APPLICATION: US 1992-829120 19920131. PRIORITY: US 1989-382137 19890719.
- AB Water-sol. complexes of cationic surfactants such as (alkoxylated) quaternary ammonium compds. and anionic surfactants such as sulfate, sulfonate, carboxylate, or phosphate type exhibit better capability in removing oily stains from fabrics than either the cationic or anionic surfactant from which they are formed. A typical complex comprised tetradecyltrimethylammonium bromide and Emphos PS-236 (mixt. of mono- and diester phosphates of a hydroxy-terminated alkoxide condensate).
- IC ICM C11D001-18
ICS C11D001-12; C11D001-38
- NCL 008137000
- CC **46-5** (Surface Active Agents and Detergents)
- ST **laundry detergent** oil stain remover; carboxylate surfactant mixt **laundry detergent**; sulfonate surfactant mixt **laundry detergent**; sulfate surfactant mixt **laundry detergent**; phosphate surfactant mixt **laundry detergent**; alkoxylated quaternary ammonium mixt **laundry detergent**
- IT **Soaps**
RL: TEM (Technical or engineered material use); USES (Uses)
(coco, anionic-cationic surfactant mixts. for removing oily stains from fabrics)
- IT **Detergents**
(**laundry**, anionic-cationic surfactant mixts. for removing oily stains from fabrics)
- IT **Soaps**
RL: TEM (Technical or engineered material use); USES (Uses)
(tallow, anionic-cationic surfactant mixts. for removing oily stains from fabrics)
- IT **36563-57-2**
RL: TEM (Technical or engineered material use); USES (Uses)
(Ethoquad T 20B; anionic-cationic surfactant mixts. for removing oily stains from fabrics)
- IT 1119-94-4, Dodecyltrimethylammonium bromide 1119-97-7, Tetradecyltrimethylammonium bromide 9004-82-4 25155-30-0, Sodium dodecylbenzenesulfonate **28724-32-5**, Ethoquad 18/25 42612-52-2, Emphos PS 236 171543-96-7, Alfonic 1214-65
RL: TEM (Technical or engineered material use); USES (Uses)
(anionic-cationic surfactant mixts. for removing oily stains from fabrics)
- IT **36563-57-2**
RL: TEM (Technical or engineered material use); USES (Uses)
(Ethoquad T 20B; anionic-cationic surfactant mixts. for removing oily stains from fabrics)
- RN 36563-57-2 HCA
- CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[[octadecyl(phenylmethyl)iminio]di-2,1-ethanediyl]bis[.omega.-hydroxy-, chloride (9CI) (CA INDEX NAME)

PAGE 1-A

● Cl⁻

PAGE 1-B



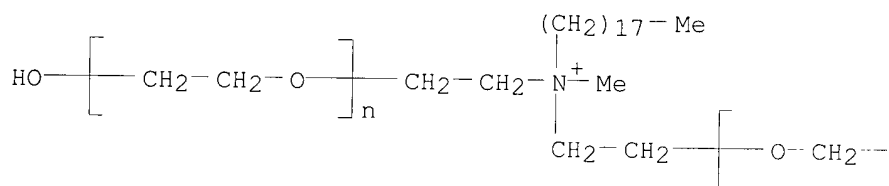
IT 28724-32-5, Ethoquad 18/25

RL: TEM (Technical or engineered material use); USES (Uses)
 (anionic-cationic surfactant mixts. for removing oily stains from fabrics)

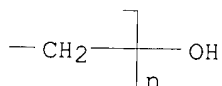
RN 28724-32-5 HCA

CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(methyloctadecyliminio)di-2,1-ethanediyl]bis[.omega.-hydroxy-, chloride (9CI) (CA INDEX NAME)

PAGE 1-A

● Cl⁻

PAGE 1-B



L53 ANSWER 25 OF 68 HCA COPYRIGHT 2003 ACS

122:191057 Anionic surfactants, alkylamidoamines and quaternary ammonium compounds in combined **laundry detergent**-fabric softener composition. Kaufman, Karel; Mikulcova, Dagmar; Prochazka, Karel (RAKONA, Czech.). Czech. CS 276643 B6 19920715, 5 pp. (Czech). CODEN: CZXXA9. APPLICATION: CS 1989-4057 19890703.

AB The title **detergents** contain anionic surfactants, additives, and also 2-8% mixt. of tertiary alkylamidopropylamines $RCONH(CH_2)_3NMe_2$ and ethoxylated alkylammonium salts $[RMe(CH_2CH_2O)_m(CH_2CH_2O)_n]^{2+} MeSO_4^-$ [$R = (un)satd. C_8-22$ hydrocarbyl; $m + n = 3-7$] in the rep. wt. ratio (3-10):1. A title **detergent** contained Na dodecylbenzenesulfonate 12, N,N-dimethyl-N-dodecylamidopropylamine 5, N,N-hepta-oxaethyl-N-methyl-N-octadecylammonium methosulfate 1, Na tripolyphosphate 30, CMC 1.5, perfume 0.25, water glass (dry residue) 3%, H_2O 3, optical brightener 0.2, and Na_2SO_4 balance to 100.

IC ICM C11D003-30

CC **46-5** (Surface Active Agents and Detergents)

ST **laundry detergent** fabric softener compn; dodecylbenzenesulfonate dimethyldodecylamidopropylamine **laundry detergent**; quaternary amine dodecylbenzenesulfonate amidoalkylamine **detergent** compn

IT Softening agents

(anionic surfactants, alkylamidoamines and quaternary ammonium compds. in combined **laundry detergent**-fabric softener compn.)

IT Surfactants

(anionic, anionic surfactants, alkylamidoamines and quaternary ammonium compds. in combined **laundry detergent**-fabric softener compn.)

IT **Detergents**

(**laundry**, anionic surfactants, alkylamidoamines and quaternary ammonium compds. in combined **laundry detergent**-fabric softener compn.)

IT Amines, uses

RL: MOA (Modifier or additive use); USES (Uses)
(tertiary, alkylamidopropyl dimethyl; anionic surfactants, alkylamidoamines and quaternary ammonium compds. in combined **laundry detergent**-fabric softener compn.)

IT 3179-80-4 22890-10-4 25155-30-0, Sodium dodecylbenzenesulfonate

38096-68-3 60270-33-9 **65104-13-4** **73602-10-5**

RL: MOA (Modifier or additive use); USES (Uses)
(anionic surfactants, alkylamidoamines and quaternary ammonium compds. in combined **laundry detergent**-fabric softener compn.)

IT **38096-68-3** **65104-13-4** **73602-10-5**

RL: MOA (Modifier or additive use); USES (Uses)
(anionic surfactants, alkylamidoamines and quaternary ammonium compds. in combined **laundry detergent**-fabric softener compn.)

RN 38096-68-3 HCA

CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(methyloctadecyliminio)di-2,1-ethanediyl]bis[.omega.-hydroxy-, methyl sulfate (salt) (9CI) (CA INDEX NAME)]

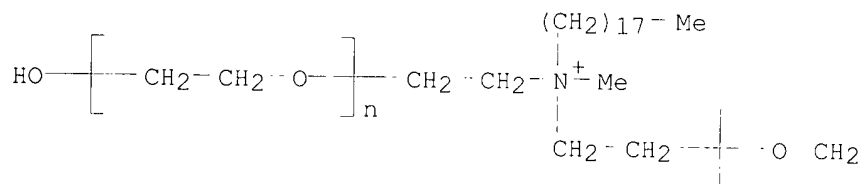
CM 1

CRN 45306-10-3

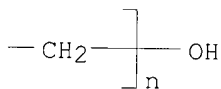
CMF (C2 H4 O)n (C2 H4 O)n C23 H50 N O2

CCI PMS

PAGE 1-A



PAGE 1-B



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO₃⁻

RN 65104-13-4 HCA

CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(docosylmethylininio)di-2,1-ethanediyl]bis[.omega.-hydroxy-, methyl sulfate (salt) (9CI) (CA INDEX NAME)

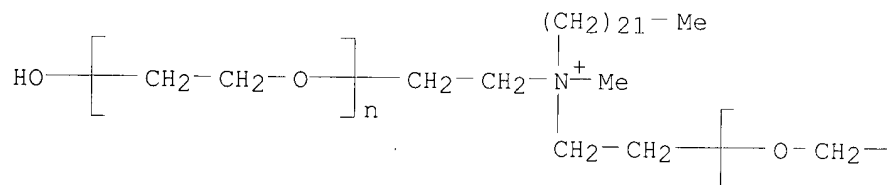
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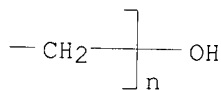
CMF (C2 H4 O)_n (C2 H4 O)_n C27 H58 N O2

CCI PMS

PAGE 1-A



PAGE 1-B



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO₃⁻

RN 73602-10-5 HCA

CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(methyloctyliminio)di-2,1-ethanediyl]bis[.omega.-hydroxy-, methyl sulfate (salt) (9CI) (CA INDEX NAME)

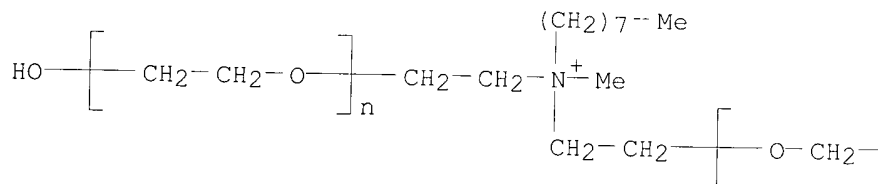
CM 1

CRN 73602-09-2

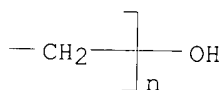
CMF (C2 H4 O)_n (C2 H4 O)_n C13 H30 N O2

CCI PMS

PAGE 1-A



PAGE 1-B



CM 2

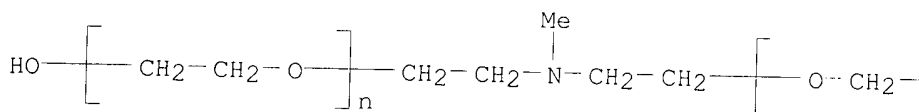
CRN 21228-90-0

CMF C H3 O4 S

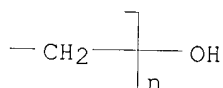
Me-O-SO₃⁻

- L53 ANSWER 30 OF 68 HCA COPYRIGHT 2003 ACS
 115:258118 **Cleaning** agents for molding apparatus for rubber. Umeki, Hiromichi; Ogawa, Taiko (Ipposha Oil Industries Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 03161310 A2 19910711 Heisei, 5 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1989-303872 19891121.
- AB The title **cleaning** agents contain alkylamine-alkylene oxide adducts in unvulcanized rubber. Thus, a mold after repeated molding of NBR was **cleaned** with a sheet contg. EPR rubber 100, white carbon 60, TiO₂, stearic acid 1, dicumyl peroxide 4, and an adduct of dibutylamine with 1 mol ethylene oxide 5 parts by vulcanizing the sheet in the mold.
- IC ICM B29C033-72
 ICS C11D007-60
- ICI C11D007-60, C11D007-44, C11D007-32
- CC 39-10 (Synthetic Elastomers and Natural Rubber)
 Section cross-reference(s): **46**
- ST **cleaner** molding app rubber; alkoxyated alkylamine
cleaner molding app
- IT **Detergents**
 (alkoxyated alkylamines, contg. rubber, for molding app. for rubber)
- IT Molding apparatus for plastics and rubbers
 (**cleaning** agents for, contg. alkoxyated alkylamines in rubber)
- IT Amines, compounds
 RL: USES (Uses)
 (alkoxyated, **cleaning** agents, contg. rubber, for molding app. for rubber)
- IT 72088-95-0
 RL: USES (Uses)
 (**cleaning** agents contg., in vulcanized rubber, for molding app. for rubber)
- IT 27014-42-2 **52001-63-5** 126305-32-6
 RL: USES (Uses)
 (**cleaning** agents, contg. in vulcanized rubber, for molding app. for rubber)
- IT **52001-63-5**
 RL: USES (Uses)
 (**cleaning** agents, contg. in vulcanized rubber, for molding app. for rubber)
- RN 52001-63-5 HCA
- CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(methylimino)di-2,1-ethanediyl]bis[.omega.-hydroxy- (9CI) (CA INDEX NAME)]

PAGE 1-A



PAGE 1-B



L53 ANSWER 35 OF 68 HCA COPYRIGHT 2003 ACS

114:121452 Preparation of 2-hydroxypropylammonium carboxylates. Klopotek, Alojzy; Iwanczuk, Edward (Instytut Chemii Przemyslowej, Pol.). Pol. PL 139477 B1 19880330, 8 pp. (Polish). CODEN: POXXA7. APPLICATION: PL 1981-232616 19810813.

AB RR1R2N+CH2CH(OH)CH2O2CZCO2- [I; R = C4-36 alkyl, C4-36 alkenyl; R1, R2 = C1-4 alkyl, hydroxyalkyl, (CH2CH2)nH, n = 1-16; Z = CH:CH, alkenyloxy, etc.] useful as antistatic agents, microbicide, and sequestering agents for metals such as Ca2+ and Fe3+, were prepd. by reacting ClCH2CH(OH)CH2O2CZCO2R4 (R4 = H, NH4, alkenyloxy, etc.) with RR1R2N. Me(CH2)17N(BuOH)2, LiOH, and ClCH2CH(OH)CH2O2CCH2C(:CH2)CO2H were reacted in presence of EtOH to give I [R = C18H37, R1 = R2 = BuOH, Z = CH2C(:CH2)] (II). Antistatic, microbicidal and sequestering activity of II was demonstrated.

IC ICM C07C093-193

ICS C07C093-233; C07C101-30

CC 23-4 (Aliphatic Compounds)

Section cross-reference(s): 5, 40, 46

IT Sequestering agents

(hydroxypropylquaternary ammonium carboxylates, for calcium and iron ions, and **detergents**)

IT 132321-81-4P 132321-86-9P 132321-87-0P 132321-88-1P

132387-56-5P 132405-67-5P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of, as bactericide and antistatic and sequestering agent)

IT 112-18-5 10213-78-2 21542-96-1 **75460-88-7** 120247-10-1

120600-55-7 132482-51-0

RL: RCT (Reactant); RACT (Reactant or reagent)

(quaternization of, by substituted carboxylates)

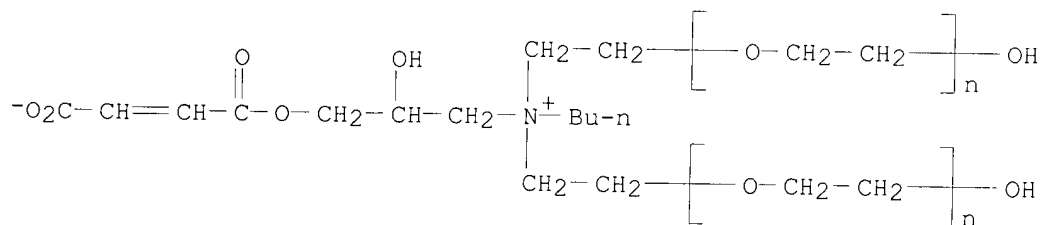
IT **132387-56-5P**

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of, as bactericide and antistatic and sequestering agent)

RN 132387-56-5 HCA

CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[[butyl[3-[(3-carboxy-1-oxo-2-propenyl)oxy]-2-hydroxypropyl]iminio]di-2,1-ethanediyl]bis[.omega.-hydroxy-, inner salt, (E)- (9CI) (CA INDEX NAME)

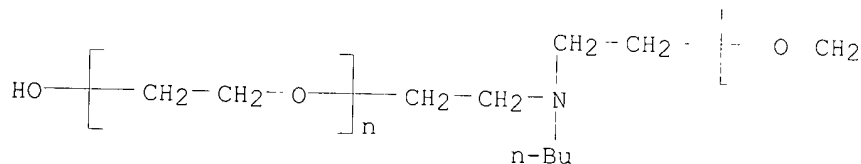
IT **75460-88-7**

RL: RCT (Reactant); RACT (Reactant or reagent)

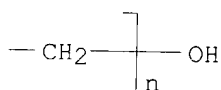
(quaternization of, by substituted carboxylates)

RN 75460-88-7 HCA
 CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(butylimino)di-2,1-ethanediyl]bis[.omega.-hydroxy- (9CI) (CA INDEX NAME)

PAGE 1-A



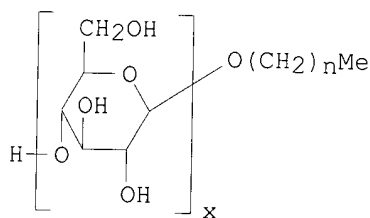
PAGE 1-B



L53 ANSWER 40 OF 68 HCA COPYRIGHT 2003 ACS

112:25368 **Detergent** compositions containing alkyl glycosides, cationic surfactants, and anionic surfactants. Nakama, Yasunari; Tamaoki, Shuya; Harusawa, Fuminori (Shiseido Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 01144497 A2 19890606 Heisei, 8 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1987-302792 19871130.

GI



AB **Detergent** compns., useful for hair, body, clothes, dishes, etc., contain alkyl glycosides I (n= 7-19; x = 1-15), quaternary ammonium salt-type cationic surfactants (A), and carboxylic acid salt-type anionic surfactants (B) (mol. ratio of A/B = 4/6-8/2). The compns. have good rinse effect and foaming ability and are not irritating to the skin. A **shampoo** comprised I (n = 8, x = 1) 15.0, Polymer JR-400 0.2, behenyltrimethylammonium chloride 2.42, N-lauroylalanine Na salt 1.23, propylene glycol 5.0, poly(oxyethylene) hydrogenated castor oil 2.0, N-lauryldimethylaminoinoacetic acid betaine 5.0, pigment, perfume, and H₂O to 100% by wt.

IC ICM C11D001-68

ICS A61K007-075; A61K007-50; C11D001-62; C11D010-04

ICI C11D010-04, C11D001-10, C11D001-62, C11D001-68, C11D009-02

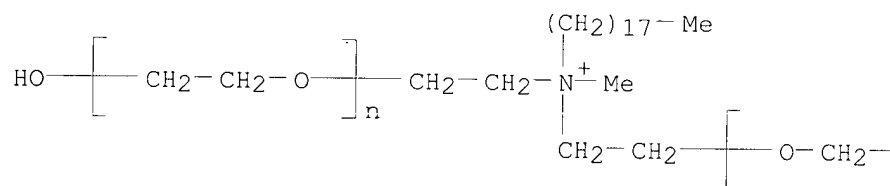
CC 62-1 (Essential Oils and Cosmetics)

Section cross-reference(s): 46

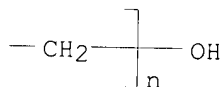
ST **detergent** glycoside cationic anionic surfactant; **shampoo**

- glycoside cationic anionic surfactant
- IT **Detergents**
Shampoos
(contg. alkyl glycosides and quaternary ammonium salts and carboxylate salts)
- IT Quaternary ammonium compounds, compounds
RL: BIOL (Biological study)
(**detergents** contg. alkyl glycosides and carboxylate salts and)
- IT Glycosides
RL: BIOL (Biological study)
(**detergents** contg. quaternary ammonium salt and carboxylate salt and)
- IT Cosmetics
(**cleansing**, contg. alkyl glycosides and quaternary ammonium salts and carboxylate salts)
- IT Carboxylic acids, compounds
RL: BIOL (Biological study)
(salts, **detergents** contg. alkyl glycosides and quaternary ammonium salts and)
- IT 112-03-8, Stearyltrimethylammonium chloride 3010-24-0 17301-53-0
28724-32-5 124303-72-6 124411-36-5
RL: BIOL (Biological study)
(**detergents** contg. alkyl glycoside and carboxylate salt and)
- IT 137-16-6, N-Lauroylsarcosine sodium salt 55535-58-5 72716-26-8
RL: BIOL (Biological study)
(**detergents** contg. alkyl glycoside and quaternary ammonium salts and)
- IT 6801-92-9 124411-37-6 124411-38-7 124508-84-5 124508-85-6
124508-86-7
RL: BIOL (Biological study)
(**detergents** contg. quaternary ammonium salt and carboxylate salt and)
- IT **28724-32-5 124303-72-6**
RL: BIOL (Biological study)
(**detergents** contg. alkyl glycoside and carboxylate salt and)
- RN 28724-32-5 HCA
- CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(methyloctadecyliminio)di-2,1-ethanediyl]bis[.omega.-hydroxy-, chloride (9CI) (CA INDEX NAME)

PAGE 1-A

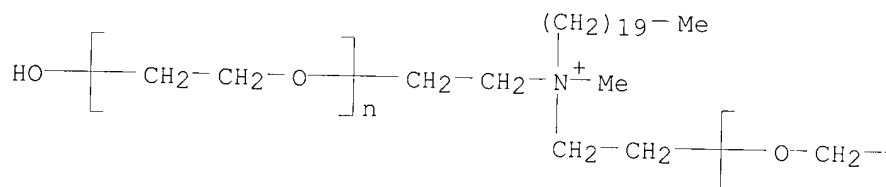
● Cl⁻

PAGE 1-B

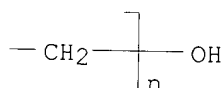


RN 124303-72-6 HCA
 CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(eicosylmethylinio)di-2,1-ethanediyl]bis[.omega.-hydroxy-, chloride (9CI) (CA INDEX NAME)

PAGE 1-A

● Cl⁻

PAGE 1-B



L53 ANSWER 45 OF 68 HCA COPYRIGHT 2003 ACS

106:121894 **Detergent** with antistatic effect. Novak, Jan; Prochazka, Karel; Tolman, Jiri; Mikulcova, Dagmar; Korinek, Jaroslav (Czech.). Czech. CS 228737 B 19860415, 4 pp. (Czech). CODEN: CZXXA9. APPLICATION: CS 1982-4626 19820622.

AB **Laundry detergents and cleaners** for textiles and plastics are prepd. which contain surfactants RN+Me[(CH₂CH₂O)_nH][(CH₂CH₂O)_mH] X⁻ (I; R = C₆-22 alkyl; n, m = 2-20; X⁻ = Cl⁻, Br⁻, MeOSO₃⁻) and compds. RNHCOCH₂NR₁CH₂CH₂NR₁₂ (II; R = C₆-22 alkyl; R₁ = CH₂CO₂R₂ with R₂ = H, Na, etc.) which exhibit a synergistic effect. Thus, a **laundry detergent** for synthetic fibers contained **soap** 15, water 39, K dodecylbenzenesulfonate 24, II (R = lauryl; R₁ = CH₂CO₂Na) 8, polyethylene glycol monolauryl ether 6, K4P207 5, I (R = lauryl; n + m = 5; X⁻ = MeOSO₃⁻) 1, and Na cumenesulfonate 2 parts.

IC C11D003-60

CC **46-6** (Surface Active Agents and Detergents)

ST ethoxylate ammonium antistatic **detergent; laundry**

detergent antistatic; **cleaner** surface antistatic; EDTA monoamide **detergent**; amide EDTA **detergent**

IT Quaternary ammonium compounds, uses and miscellaneous
 RL: USES (Uses)
 (ethoxylated, antistatic **detergents** contg., for textiles and hard surfaces)

IT Amides, uses and miscellaneous
 RL: USES (Uses)
 (mono, of EDTA, **detergents** contg., for textiles and hard surfaces)

IT **Detergents**
 (**cleaning** compns., liq., antistatic, contg. EDTA monoamide and ethoxylated ammonium compd.)

IT **Detergents**
 (**laundry**, liq., antistatic, contg. EDTA monoamide and ethoxylated ammonium compd.)

IT **71393-81-2** 75006-05-2
 RL: TEM (Technical or engineered material use); USES (Uses)
 (**detergents** contg., for textiles and surfaces, with antistatic effects)

IT **71393-81-2**
 RL: TEM (Technical or engineered material use); USES (Uses)
 (**detergents** contg., for textiles and surfaces, with antistatic effects)

RN 71393-81-2 HCA

CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(dodecylmethylinio)di-2,1-ethanediyl]bis[.omega.-hydroxy-, methyl sulfate (salt) (9CI) (CA INDEX NAME)

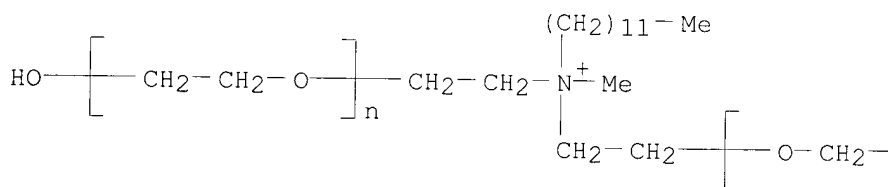
CM 1

CRN 71393-80-1

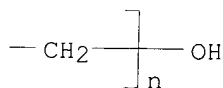
CMF (C2 H4 O)n (C2 H4 O)n C17 H38 N O2

CCI PMS

PAGE 1-A



PAGE 1-B



CM 2

CRN 21228-90-0
CMF C H3 O4 S

Me-O-SO₃⁻

L53 ANSWER 50 OF 68 HCA COPYRIGHT 2003 ACS

100:139797 Water-soluble or dispersible graft polymers and their use.
Schaefer, Paul; Abel, Heinz; Guth, Christian; Stehlin, Albert (Ciba-Geigy A.-G., Switz.). Eur. Pat. Appl. EP 98803 A1 19840118, 54 pp. DESIGNATED STATES: R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE. (German). CODEN: EPXXDW. APPLICATION: EP 1983-810291 19830630. PRIORITY: CH 1982-4116 19820706.

AB Graft polymers useful in textile finishing, papermaking, etc. contain hydrophilic, C-bonded graft segments attached to hydrophobic residues through polyoxyalkylene chains with d.p. 2-200. Thus, adding 1 g Bz2O2 in 35 g acrylic acid over 30 min to 15 g C9H19C6H4(OCH2CH2)10OH in 150 g H2O stirred at 70.degree. and stirring 3 h at 70.degree. gave 200 g 25.2% soln. of graft polymer [89527-50-4]. Washing a dihydroxydimethylolurea-finished cotton-polyester blend fabric in an 0.6% **detergent** soln. contg. 0.1% this polymer and 0.4% air filter dust at 60.degree. gave a fabric with reflectance 78%, compared with 41 when washed without the graft polymer.

IC C08F283-06; D06P001-607; D06M013-38

CC 35-4 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 38, 40, 43, **46**

ST polyoxyethylene graft polymer; polymn graft polyoxyethylene; acrylic acid grafted polyoxyethylene; nonylphenol ethoxylated grafting;
detergent graying inhibitor

IT **Detergents**

(graying inhibitors for, (meth)acrylic acid-grafted polyoxyalkylenes as)

IT 9016-45-9P 9036-19-5P 25791-96-2P 26264-02-8P 27176-93-8P
89526-84-1P 89526-86-3P 89527-47-9P 89527-49-1P

RL: PREP (Preparation)

(graft, manuf. and uses of)

IT **89526-84-1P**

RL: PREP (Preparation)

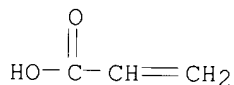
(graft, manuf. and uses of)

RN 89526-84-1 HCA

CN 2-Propenoic acid, polymer with .alpha.,.alpha.'-[(dodecylmethyliminio)di-2,1-ethanediy]bis[.omega.-hydroxypoly(oxy-1,2-ethanediy)] methyl sulfate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7
CMF C3 H4 O2



CM 2

CRN 71393-81-2

CMF (C2 H4 O)n (C2 H4 O)n C17 H38 N O2 . C H3 O4 S

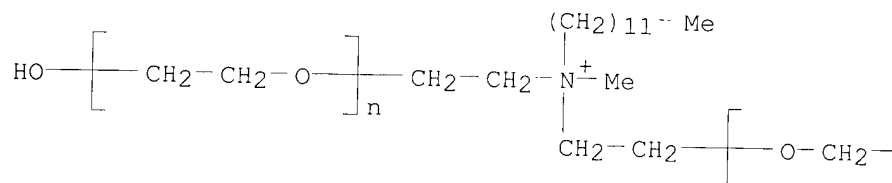
CM 3

CRN 71393-80-1

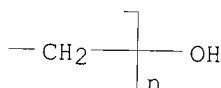
CMF (C2 H4 O)n (C2 H4 O)n C17 H38 N O2

CCI PMS

PAGE 1-A



PAGE 1-B



CM 4

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO₃⁻

L53 ANSWER 52 OF 68 HCA COPYRIGHT 2003 ACS

99:196983 Spray **cleaner** for transportation vehicle bodies. Fox, Derek J. (Johnson, S. C., and Son, Inc., USA). Can. CA 1149255 A1 19830705, 22 pp. (English). CODEN: CAXXA4. APPLICATION: CA 1980-365495 19801126. PRIORITY: US 1979-98156 19791128.

AB A **cleaner** contg. a chelating agent, a bis(ethoxylated) quaternary ammonium compd., an ethoxylated alc., and Na₂SiO₃ is useful for spray-cleaning of vehicle bodies without brushing or scrubbing. Thus, a **cleaner** contained Na₂SiO₃ 1, N(CH₂CO₂Na)₃ 11.8, ethoxylated (6 mol) C9-11 alcs. 1.25, coco alkylbis(ethoxylated)methylammonium chloride (15 mol oxirane) 2, and water 83.95%.

IC C11D001-66

CC 46-6 (Surface Active Agents and Detergents)

ST **cleaner** spray vehicle; ammonium ethoxylate **cleaner** vehicle

IT Vehicles

(cleaners for, spray)

IT Detergents

(cleaning compns., spray, for vehicles)

IT 38096-68-3 38815-76-8 84930-88-1 87781-21-3

RL: USES (Uses)

(cleaners contg., spray, for vehicles)
IT 38096-68-3 38815-76-8 87781-21-3

RL: USES (Uses)

(cleaners contg., spray, for vehicles)
RN 38096-68-3 HCA

CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(methyloctadecyliminio)di-2,1-ethanediyl]bis[.omega.-hydroxy-, methyl sulfate (salt) (9CI) (CA INDEX NAME)

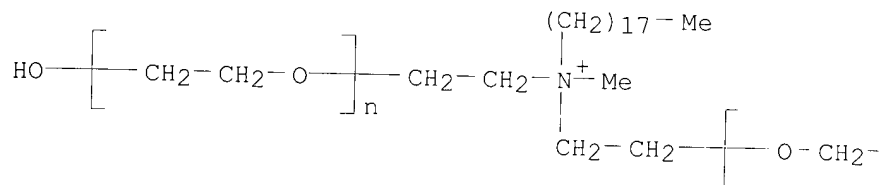
CM 1

CRN 45306-10-3

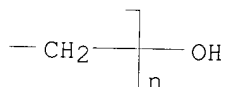
CMF (C2 H4 O)n (C2 H4 O)n C23 H50 N O2

CCI PMS

PAGE 1-A



PAGE 1-B



CM 2

CRN 21228-90-0

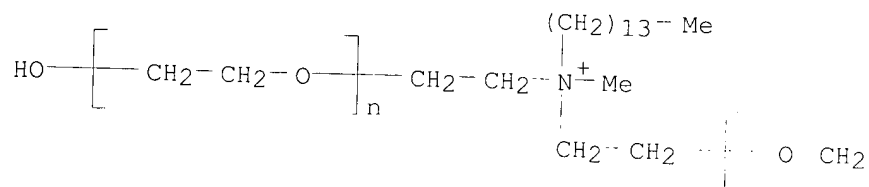
CMF C H3 O4 S

Me-O-SO₃⁻

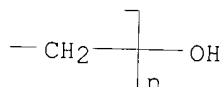
RN 38815-76-8 HCA

CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(methyltetradecyliminio)di-2,1-ethanediyl]bis[.omega.-hydroxy-, chloride (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

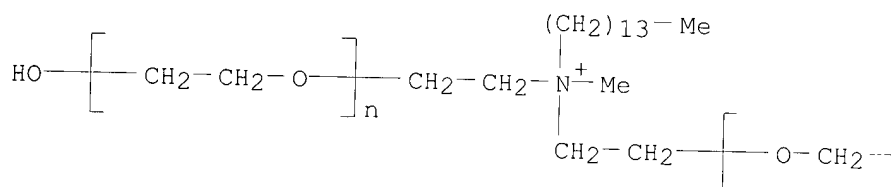


RN 87781-21-3 HCA
 CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(methyltetradecyliminio)di-2,1-ethanediyl]bis[.omega.-hydroxy-, methyl sulfate (salt) (9CI) (CA INDEX NAME)

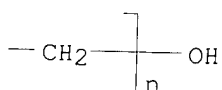
CM 1

CRN 87781-20-2
 CMF (C2 H4 O)_n (C2 H4 O)_n C19 H42 N O2
 CCI PMS

PAGE 1-A



PAGE 1-B



CM 2

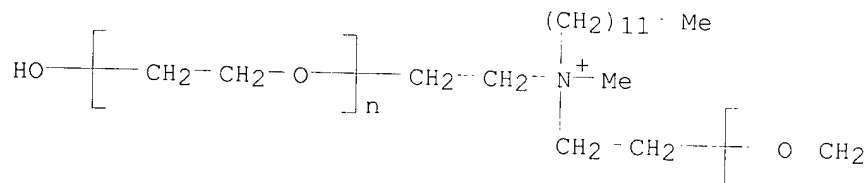
CRN 21228-90-0

CMF C H3 O4 S

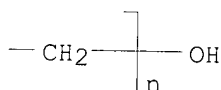
Me-O-SO₃⁻

- L53 ANSWER 54 OF 68 HCA COPYRIGHT 2003 ACS
98:217671 **Detergents**. (Kao Soap Co., Ltd., Japan). Jpn. Kokai
Tokkyo Koho JP 57202391 A2 19821211 Showa, 8 pp. (Japanese). CODEN:
JKXXAF. APPLICATION: JP 1981-86641 19810605.
- AB **Dishwashing detergents** mild to skin and having good
detergency and foaming properties and no water repelling contain
alkyl polyether carboxylic acid salts, quaternary ammonium compds., and
nonionic surfactants. Thus, a **detergent** contg.
RO(CH₂CH₂O)_nCH₂CO₂Na (R = C₁₂, n = 3) 20, C₁₂H₂₅N+Me₃Cl⁻ [112-00-5] 5, a
polyoxyethylene secondary alc. (C₁₂) ether (d.p. 12) 5, and water 70% had
detergency 4 dishes, foaming height 80 mm, and no water repelling,
compared with 3.5, 68, and water repelling for a **detergent**
contg. no poly(oxyethylene) secondary alc. ether.
C11D001-06; C11D001-62; C11D001-72
- IC 46-6 (Surface Active Agents and Detergents)
CC **dishwashing detergent**; nonionic surfactant
ST **dishwashing detergent**; cationic surfactant
dishwashing detergent; polyether carboxylate
dishwashing detergent
- IT Quaternary ammonium compounds, uses and miscellaneous
RL: USES (Uses)
(**detergents**, contg. nonionic surfactants and alkyl polyether
carboxylic acid salts, for **dishwashing**)
- IT Carboxylic acids, compounds
RL: USES (Uses)
(polyalkoxylated alkyl derivs., **detergents**, contg. quaternary
ammonium compds. and nonionic surfactants, for **dishwashing**)
- IT **Detergents**
(**dishwashing**, contg. alkyl polyether carboxylic acid salts
and quaternary ammonium compds. and nonionic surfactants)
- IT 25322-68-3D, alkyl ethers
RL: USES (Uses)
(**detergents**, contg. alkyl polyether carboxylic acid salts and
quaternary ammonium compds., for **dishwashing**)
- IT 1119-97-7 10108-86-8 10108-87-9 80236-52-8 85968-78-1
85968-80-5 85968-81-6
RL: USES (Uses)
(**detergents**, contg. nonionic surfactants and alkyl polyether
carboxylic acid salts, for **dishwashing**)
- IT 112-00-5
RL: USES (Uses)
(**detergents**, contg. nonionic surfactants and polyalkyl ether
carboxylic acid salts, for **dishwashing**)
- IT 80236-52-8
RL: USES (Uses)
(**detergents**, contg. nonionic surfactants and alkyl polyether
carboxylic acid salts, for **dishwashing**)
- RN 80236-52-8 HCA
CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(dodecylmethylinio)di-2,1-
ethanediyl]bis[.omega.-hydroxy-, bromide (9CI) (CA INDEX NAME)]

PAGE 1-A



PAGE 1-B



L53 ANSWER 57 OF 68 HCA COPYRIGHT 2003 ACS

88:193210 Dry **cleaning** solvent compositions. Hisamoto, Iwao; Maeda, Tomoaki; Idekuchi, Takayuki; Ohmure, Yukio; Ohnishi, Takasuke (Daikin Kogyo Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 52126409 19771024 Showa, 12 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1976-44082 19760416.

AB **Cleaning** compns. comprised trichlorotrifluoroethane (I) [26523-64-8] and surfactants such as poly(oxyethylene)stearyltrimethylenediamine di(2-ethylhexyl) sulfosuccinate salt (II) [66401-72-7] and oleylpoly(oxyethylene)amine dodecylbenzenesulfonic acid salt (III) [66467-20-7]. Thus, 0.5% mixt. contg. 60:40 II-III was dissolved in 400 mL I to prep. a **cleaning** compn.

IC C11D010-02

CC 46-5 (Surface Active Agents and Detergents)

ST chlorofluoroethane surfactant **cleaning** compn; fluorochloroethane surfactant **cleaning** compn; amine salt **cleaning** compn; polyoxyethylene amine surfactant **cleaning**

IT Amines, compounds

RL: USES (Uses)

(polyoxyethylene derivs., salts, surfactants, for **cleaning** compns.)

IT **Detergents**

(**cleaning** compns., contg. trifluorotrichloroethane and surfactants)

IT 26523-64-8

RL: USES (Uses)

(**cleaning** compns., contg. surfactants)

IT 577-11-7 27177-77-1 66401-66-9 **66401-68-1** 66401-69-2

66401-71-6 66401-72-7 66407-51-0 66467-20-7

RL: TEM (Technical or engineered material use); USES (Uses)
(surfactants, for dry **cleaning** compns.)

IT **66401-68-1 66401-71-6 66401-72-7**

RL: TEM (Technical or engineered material use); USES (Uses)

(surfactants, for dry **cleaning** compns.)

RN 66401-68-1 HCA
 CN Hexanoic acid, 2-ethyl-, compd. with .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl) ether with 2,2'-[[4-[dodecyl(2-hydroxyethyl)amino]butyl]imino]bis[ethanol] (3:1) (9CI) (CA INDEX NAME)

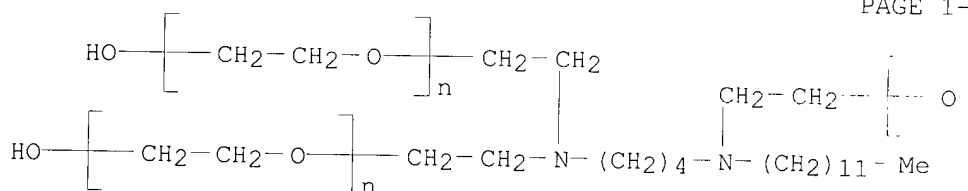
CM 1

CRN 66401-67-0

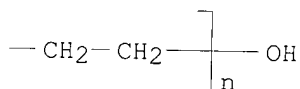
CMF (C2 H4 O)_n (C2 H4 O)_n (C2 H4 O)_n C22 H48 N2 O3

CCI PMS

PAGE 1-A



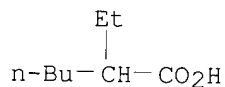
PAGE 1-B



CM 2

CRN 149-57-5

CMF C8 H16 O2



RN 66401-71-6 HCA

CN 9-Octadecenoic acid (9Z)-, compd. with .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl) ether with 2,2'-[[4-[(2-hydroxyethyl)octylamino]butyl]imino]bis[ethanol] (3:1) (9CI) (CA INDEX NAME)

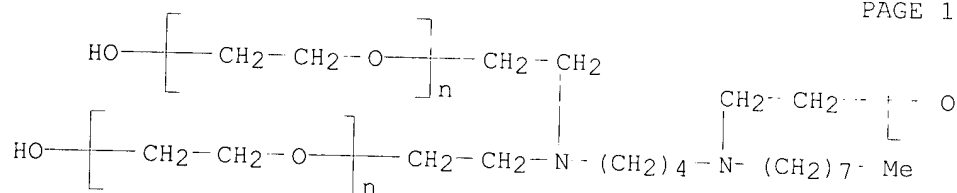
CM 1

CRN 66401-70-5

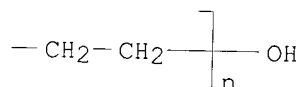
CMF (C2 H4 O)_n (C2 H4 O)_n (C2 H4 O)_n C18 H40 N2 O3

CCI PMS

PAGE 1-A



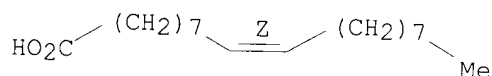
PAGE 1-B



CM 2

CRN 112-80-1
CMF C18 H34 O2

Double bond geometry as shown.



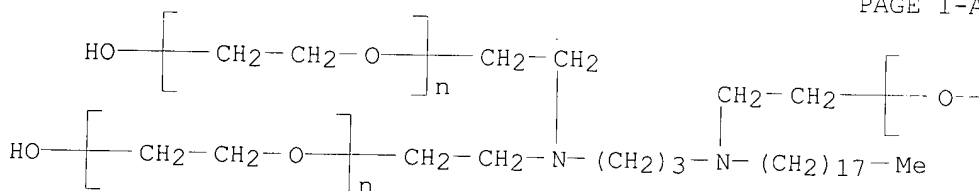
RN 66401-72-7 HCA

CN Butanedioic acid, sulfo-, 1,4-bis(2-ethylhexyl) ester, compd. with
.alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl) ether with
2,2'-[[3-[(2-hydroxyethyl)octadecylamino]propyl]imino]bis[ethanol] (3:1)
(9CI) (CA INDEX NAME)

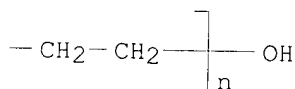
CM 1

CRN 36356-75-9
CMF (C2 H4 O)n (C2 H4 O)n (C2 H4 O)n C27 H58 N2 O3
CCI PMS

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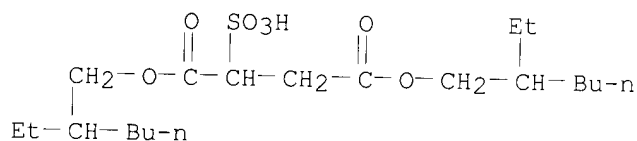
PAGE 1-B



CM 2

CRN 10041-19-7

CMF C20 H38 O7 S



L53 ANSWER 60 OF 68 HCA COPYRIGHT 2003 ACS

84:91550 **Cleaning** compositions for polyester fabric dyeing vessels and polymerization reactors. Matsuba, Kenichi; Tachibana, Nobuji; Kanaoka, Yasuyuki (Ittsuposha Yushi Kogyo K. K., Japan). Jpn. Kokai Tokkyo Koho JP 50136305 19751029 Showa, 4 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1974-44657 19740419.

AB Aq. compns. contg. [RN[(CH₂CH₂O)_mH][CH₂CH₂O)_nH]CH₂Ph]+Cl⁻ (R = C₁₈H₃₇ or C₁₂H₂₅; m + n = 2-50) and NaOH [1310-73-2] were useful for **cleaning** vessels for dyeing polyester fabrics and reactors for polymn. of vinyl or acrylic compds. Thus, a polyester knitted fabric was dyed with an aq. compn. contg. a disperse dye in a circular dyeing machine at 130.degree. and 4.0 kg/cm² for 10 cycles. The resulting vessel was washed with an aq. compn. contg. Na₂S₂O₄ 2, NaOH 10, and [C₁₈H₃₇N[(CH₂CH₂O)₂H][(CH₂CH₂O)₂H]CH₂Ph]+Cl⁻ 1 [58380-88-4] 3 g/l. to give a **cleaned** vessel without scums, whereas scums were obsd. on washing the vessel with an aq. compn. contg. Na₂S₂O₄ 2, NaOH 10, and polyethylene glycol nonylphenylether 3 g/l.

IC Cl1D

CC 39-7 (Textiles)

Section cross-reference(s): 46

ST quaternary ammonium chloride reactor **cleaning**; polyester dyeing vessel **cleaning**; polymn reactor **cleaning**; polyoxyethylenated quaternary ammonium chloride

IT Polyester fibers

RL: USES (Uses)

(dyeing of, with disperse dyes, vessel **cleaning** by

poly(oxyethylenated) quaternary ammonium compds. in relation to)

IT Dyeing apparatus

(for polyester fabrics, **cleaning** compns. for,

poly(oxyethylenated) quaternary ammonium compds. as)

IT Quaternary ammonium compounds, uses and miscellaneous

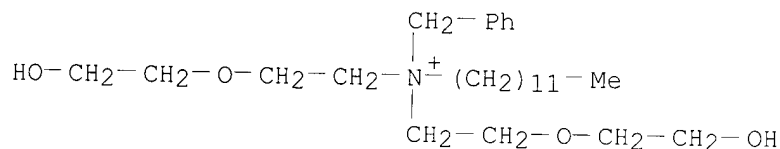
RL: USES (Uses)

(poly(oxyethylenated), **cleaning** compns. contg., for polyester fabric dyeing vessels and polymn. reactors)

IT Reactors

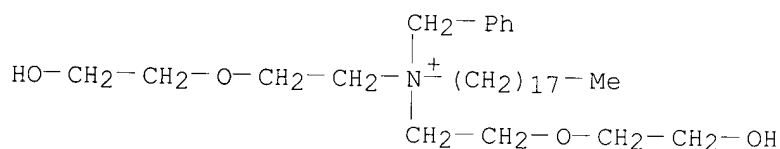
(polymn., **cleaning** of, with poly(oxyethylenated) quaternary ammonium chlorides)IT **Detergents**

- (polyoxyethylated quarternary ammonium chlorides, for **cleaning** dyeing and polymn. reactors)
- IT Polymerization
(reactors, for vinyl or acrylic compds., **cleaning** compns. for, poly(oxyethylenated) quarternary ammonium chlorides as)
- IT **58380-87-3**
RL: USES (Uses)
(**cleaning** compns. contg., for polyester fabric dyeing vessels)
- IT 1310-73-2, uses and miscellaneous **58380-88-4**
RL: USES (Uses)
(**cleaning** compns. contg., for polyester fabric dyeing vessels and polymn. reactors)
- IT **58380-87-3**
RL: USES (Uses)
(**cleaning** compns. contg., for polyester fabric dyeing vessels)
- RN 58380-87-3 HCA
CN Benzenemethanaminium, N-dodecyl-N,N-bis[2-(2-hydroxyethoxy)ethyl]-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

- IT **58380-88-4**
RL: USES (Uses)
(**cleaning** compns. contg., for polyester fabric dyeing vessels and polymn. reactors)
- RN 58380-88-4 HCA
CN Benzenemethanaminium, N,N-bis[2-(2-hydroxyethoxy)ethyl]-N-octadecyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

- L53 ANSWER 61 OF 68 HCA COPYRIGHT 2003 ACS
83:166213 Toilet **detergent** bar. Barnes, Nicholas Morrison; Cheng, Wai Ming; Rickards, Tudor; Rosser, David A.; Thurairajan, Ponnuswamy (Unilever N. V., Austria). Austrian AT 3202707 19750610, 37 pp. (German). CODEN: AUXXAK. APPLICATION: AT 1970-5414 19700616.
- AB Reaction products of polyethylene glycol (I) [25322-68-3] (or a I deriv.)

with epichlorohydrin (II) [106-89-8] and a tertiary amine such as $H(CH_2)_{18}NMe_2$ (III) [124-28-7], $[H(OCH_2CH_2)_n]_2N^+(CH_2Ph)[(CH_2)_{18}H] Br^-$ [36496-06-7], $H(OCH_2CH_2)_nN^+Me_2[(CH_2)_{18}H] Cl^-$ [38816-52-3], and similar quaternary ammonium compds. (.apprx.60) contg. poly(oxyethylene) groups were used (.gtoreq.15%) in **soap** and **detergent** bars to give good after-wash feel and min. irritation of skin. The quaternary ammonium compds. were good lime **soap** dispersants and were compatible with anionic **detergents**. Thus, 1 kg I (mol. wt. 1000) was treated with 18.5 g II in the presence of 3 ml BF_3 etherate, and the reaction product (400 g) was refluxed 48 hr with 223 g III to prep. a quaternary ammonium compd. which was used with 10% coconut oil ethanolamide or 80% Na **soaps** to prep. toilet bars.

IC

CC

ST

46-6 (Surface Active Agents and Detergents)

detergent bar quaternary polyoxyethylene; **soap** bar quaternary polyoxyethylene; ammonium polyoxyethylene **detergent** bar; skin compatibility **detergent** bar

IT

Detergents

(bars, contg. quaternary ammonium compds. with poly(oxyethylene) groups, for skin compatibility)

IT

Quaternary ammonium compounds, uses and miscellaneous
RL: USES (Uses)

(poly(oxyethylene) group-contg., **detergent** bars contg., for skin compatibility)

IT

1,2-Ethanediamine, N-octadecyl-, reaction products with oxirane and org. halides

1,3-Propanediamine, N,N'-bis(3-aminopropyl)-, monooctadecyl deriv., reaction products with oxirane and org. halides

1,3-Propanediamine, N-octadecyl-, reaction products with oxirane and org. halides

1-Dodecanamine, N,N-dimethyl-, quaternary polyoxyethylene derivs.

1-Octadecanamine, N,N-dimethyl-, quaternary polyoxyethylene derivs.

1-Octadecanamine, N-methyl-N-octadecyl-, quaternary polyoxyethylene derivs.

Aziridine, homopolymer, quaternary polyoxyethylene derivs.

Benzenemethanamine, 4-dodecyl-N,N-dimethyl-, quaternary polyoxyethylene derivs.

Benzenemethanamine, ar-dodecyl-N,N-dimethyl-, quaternary polyoxyethylene derivs.

Ethanol, 2,2',2''-nitrilotris-, reaction products with oxirane and org. halides

Ethanol, 2-(dimethylamino)-, quaternary polyoxyethylene derivs.

Morpholine, reaction products with oxirane and org. halides

Octadecanamide, N,N-bis(2-hydroxyethyl)-, reaction products with oxirane, epichlorohydrin, and tertiary amines

Octadecanamide, N-[3-(dimethylamino)propyl]-, quaternary polyoxyethylene derivs.

Octadecanoic acid, 2-(dimethylamino)ethyl ester, quaternary polyoxyethylene derivs.

Oxirane, polymer with methyloxirane, reaction products with epichlorohydrin and tertiary amines

Oxirane, reaction products with alcs., epichlorohydrin, and tertiary amines

Oxirane, (chloromethyl)-, reaction products with poly(oxyethylene)monoethers and tertiary amines

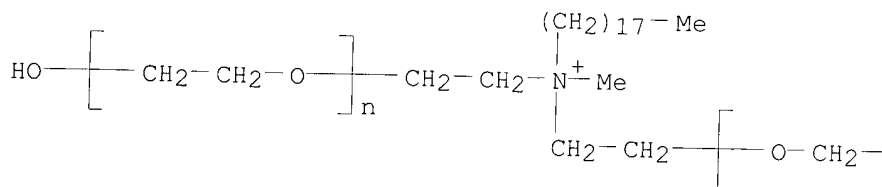
Oxirane, methyl-, polymer with oxirane, reaction products with epichlorohydrin and tertiary amines

Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.',.alpha.''-1,2,3-propanetriyltris[.omega.-hydroxy-, reaction products with epichlorohydrin and tertiary amines

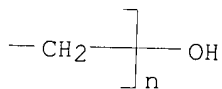
Poly(oxy-1,2-ethanediyl), .alpha.-(1-oxooctadecyl)-.omega.-hydroxy-,
 reaction products with epichlorohydrin and tertiary amines
 Poly(oxy-1,2-ethanediyl), .alpha.-[2-[(1-oxooctadecyl)amino]ethyl]-.omega.-
 hydroxy-, reaction products with epichlorohydrin and tertiary amines
 Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, monoalkyl
 ethers, reaction products with epichlorohydrin and tertiary amines
 Poly(oxy-1,2-ethanediyl), .alpha.-octadecyl-.omega.-hydroxy-, reaction
 products with epichlorohydrin and tertiary amines
 Poly(oxy-1,2-ethanediyl), .alpha.-pentadecyl-.omega.-hydroxy-, reaction
 products with epichlorohydrin and tertiary amines
 Pyridine, quaternary polyoxyethylene derivs.
 RL: USES (Uses)

(detergent bars contg., with skin compatibility)
 IT 2915-90-4 28724-32-5 36446-89-6 36446-90-9
 36446-91-0 36446-92-1 36446-93-2 36446-94-3
 36446-95-4 36447-06-0 36496-06-7 36496-07-8
 36496-13-6 36496-14-7 36496-17-0 36496-18-1
 36563-57-2 37314-78-6 37314-79-7
 38814-85-6 38814-94-7 38816-52-3 38816-53-4 38891-24-6
 RL: USES (Uses)
 (detergent bars contg., with skin compatibility)
 IT 124-28-7 26248-71-5 26635-92-7 34390-73-3 36936-60-4 39840-35-2
 56867-90-4 56867-91-5 56899-26-4
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (quaternization of, by org. halides)
 IT 28724-32-5 36446-91-0 36446-92-1
 36496-06-7 36496-07-8 36496-13-6
 36496-14-7 36563-57-2 37314-78-6
 37314-79-7 38814-85-6
 RL: USES (Uses)
 (detergent bars contg., with skin compatibility)
 RN 28724-32-5 HCA
 CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(methyloctadecyliminio)di-2,1-
 ethanediyl]bis[.omega.-hydroxy-, chloride (9CI) (CA INDEX NAME)]

PAGE 1-A

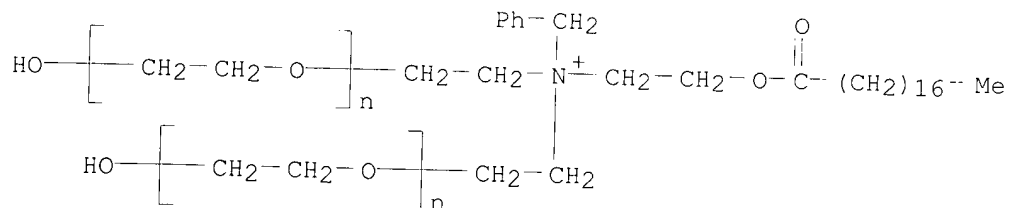
● Cl⁻

PAGE 1-B



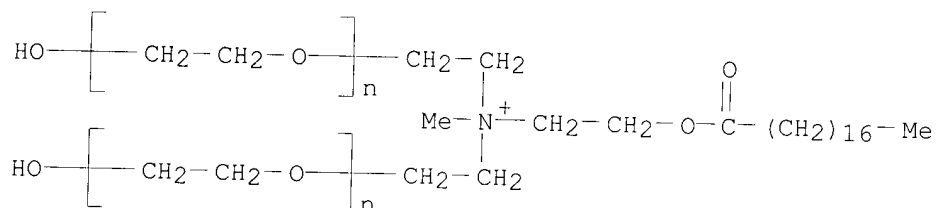
RN 36446-91-0 HCA

CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[[[2-[(1-oxooctadecyl)oxy]ethyl](phenylmethyl)iminio]di-2,1-ethanediyl]bis[.omega.-hydroxy-, bromide (9CI) (CA INDEX NAME)]

● Br⁻

RN 36446-92-1 HCA

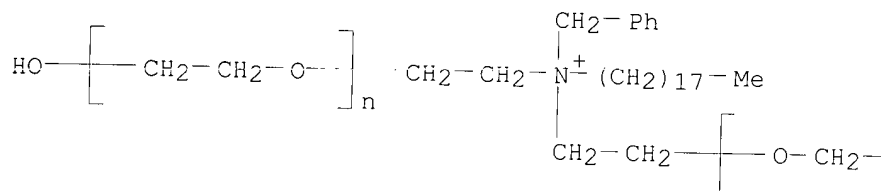
CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[[[methyl[2-[(1-oxooctadecyl)oxy]ethyl]iminio]di-2,1-ethanediyl]bis[.omega.-hydroxy-, iodide (9CI) (CA INDEX NAME)]

● I⁻

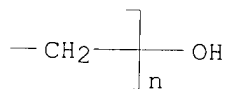
RN 36496-06-7 HCA

CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[[[octadecyl(phenylmethyl)iminio]]di-2,1-ethanediyl]bis[.omega.-hydroxy-, bromide (9CI) (CA INDEX NAME)]

PAGE 1-A

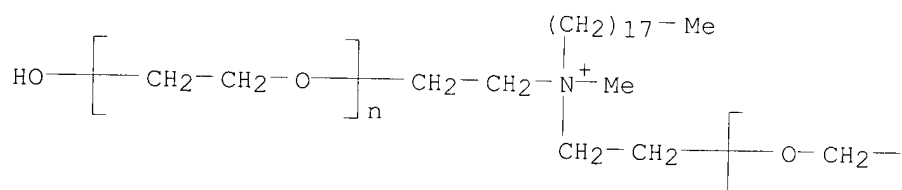
● Br⁻

PAGE 1-B

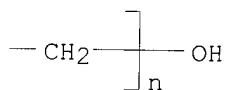


RN 36496-07-8 HCA
 CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(methyloctadecyliminio)di-2,1-ethanediyl]bis[.omega.-hydroxy-, iodide (9CI) (CA INDEX NAME)

PAGE 1-A

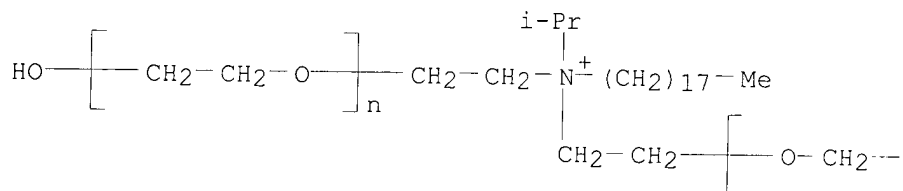


PAGE 1-B

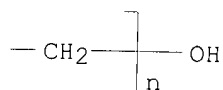


RN 36496-13-6 HCA
 CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[[(1-methylethyl)octadecyliminio]di-2,1-ethanediyl]bis[.omega.-hydroxy-, iodide (9CI) (CA INDEX NAME)

PAGE 1-A

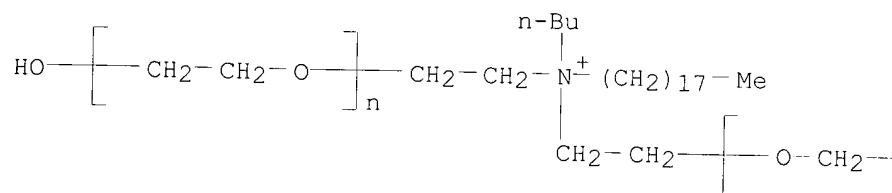


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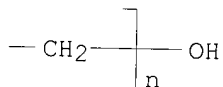


RN 36496-14-7 HCA
 CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(butyloctadecyliminio)di-2,1-ethanediyl]bis[.omega.-hydroxy-, iodide (9CI) (CA INDEX NAME)]

PAGE 1-A

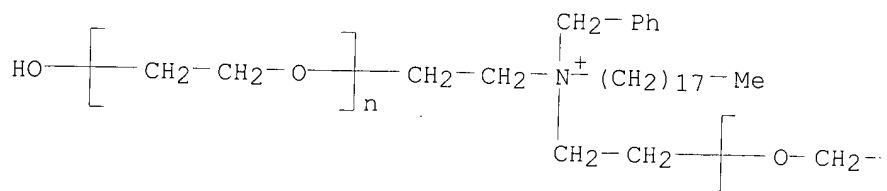


PAGE 1-B

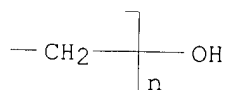


RN 36563-57-2 HCA
 CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[[octadecyl(phenylmethyl)iminio]di-2,1-ethanediyl]bis[.omega.-hydroxy-, chloride (9CI) (CA INDEX NAME)]

PAGE 1-A

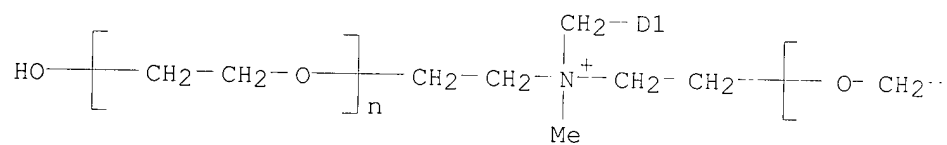
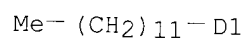


PAGE 1-B

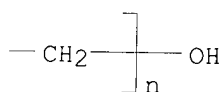


RN 37314-78-6 HCA
 CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[[[(dodecylphenyl)methyl]methyl
 iminio]di-2,1-ethanediyl]bis[.omega.-hydroxy-, iodide (9CI) (CA INDEX
 NAME)

PAGE 1-A

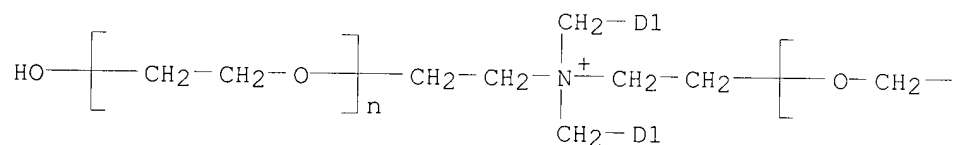
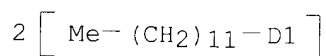
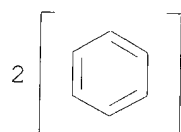


PAGE 1-B

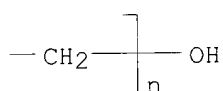


RN 37314-79-7 HCA
 CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[[bis[(dodecylphenyl)methyl]imino]di-2,1-ethanediyl]bis[.omega.-hydroxy-, chloride (9CI) (CA INDEX NAME)

PAGE 1-A



● Cl^-

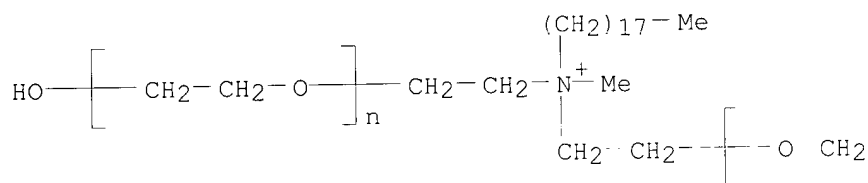

$$\begin{array}{c} \text{HO}-\left[\text{CH}_2-\text{CH}_2-\text{O} \right]_n-\text{CH}_2-\text{CH}_2 \\ | \\ \text{Me}-(\text{CH}_2)_{17}-\text{N}^+-\text{CH}_2 \\ | \\ \text{HO}-\left[\text{CH}_2-\text{CH}_2-\text{O} \right]_n-\text{CH}_2-\text{CH}_2 \\ | \\ \text{C}_6\text{H}_4-(\text{CH}_2)_{11}-\text{Me} \end{array}$$

● Cl^-

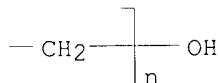
$$\text{HO}-\left[\text{CH}_2-\text{CH}_2-\text{O}\right]_n-\text{CH}_2-\text{CH}_2-\text{N}-\text{CH}_2-\text{CH}_2-\text{O}-\overset{\text{O}}{\parallel}{\text{C}}-(\text{CH}_2)_{16}-\text{Me}$$

- 82:100623 Phosphate-free soft-rinsing **detergent** composition.
Inamorato, Jack T. (Colgate-Palmolive Co.). Ger. Offen. DE 2426581
19741219, 26 pp. (German). CODEN: GWXXBX. APPLICATION: DE
1974-2426581 19740531.
- AB Liq. **detergents** contg. 10-40% nonionic surfactant and/or amine
oxide surfactant and 3-15% of a mixt. of a quaternary ammonium softening
agent and $H(OCH_2CH_2)_nN^+MeR_1Cl^-$ ($n = 10-60$, $R = C_8-22$ alkyl and $R_1 = C_1-22$
alkyl) or $(CH_2CH_2O)_nH$ were prepd. which imparted antistatic properties and
softness to textiles **laundered** with the **detergents**.
Thus, a **detergent** comprised a nonionic surfactant 15,
polyethoxylated (15 moles) methylstearylammonium chloride 1,
dialkyl(hydrogenated tallow)dimethylammonium chloride 2.5, EtOH 10,
triethanolamine 0.5, whitener soln. 2, dye soln. 0.5, perfume 0.2, and
water 68.3%.
- IC C11D
CC **46-5** (Surface Active Agents and Detergents)
ST **detergent** liq antistatic softening; ethoxylated ammonium
antistatic **detergent**; ammonium **detergent** antistatic
softening
IT Softening agents
(for textiles, ammonium compds. as, liq. **detergents** contg.)
IT **Detergents**
(liq., contg. antistatic and softening agents, for textiles)
IT Antistatic agents
(poly(oxyethylene) derivs. of ammonium compds., liq. **laundry**
detergents contg.)
IT Quaternary ammonium compounds, uses and miscellaneous
RL: USES (Uses)
(poly(oxyethylene) derivs., antistatic and softening agent, liq.
detergents contg.)
IT Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, ammonium derivs.
RL: USES (Uses)
(antistatic agents, liq. **laundry detergents** contg.)
IT **28724-32-5**
RL: USES (Uses)
(antistatic agents, liq. **laundry detergents** contg.)
IT **28724-32-5**
RL: USES (Uses)
(antistatic agents, liq. **laundry detergents** contg.)
RN **28724-32-5** HCA
CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(methyloctadecyliminio)di-2,1-
ethanediyl]bis[.omega.-hydroxy-, chloride (9CI) (CA INDEX NAME)]

PAGE 1-A

● Cl⁻

PAGE 1-B



L53 ANSWER 63 OF 68 HCA COPYRIGHT 2003 ACS

81:66082 Solubilizing alkoxyated fatty substrates. McCoy, Frederic C. U.S. US 3793351 19740219, 6 pp. (English). CODEN: USXXAM. APPLICATION: US 1971-207550 19711213.

AB A process is given for solubilizing alkoxyated fatty substrates (e.g., surfactants, antioxidants), contg. 1-30 oxyalkylene groups, which are <0.10% sol. in mineral oil, into oil sol. complexes by mixing with an alkylated phenol. The oxyalkylenated fatty substrates can be alkylated phenols, fatty acids, amines, amides, oximes or nitriles. The alkylated phenol solubilizing agents can be C4-13 alkyl- or (substituted-alkyl)phenols contg. branched alkyl groups. When 1 part of an oxyethylenated nonylphenol contg. 15 oxyethylene groups is added to 999 parts of a paraffin base SAE 20 oil at 180.degree.F complete soly. occurs, however the 2 phases sep. on cooling to 80.degree.F. When 20 parts of a blend of 1 part oxyethylenated nonylphenol contg. 15 oxyethylene groups and 2.33 parts of dodecylphenol are added to 980 parts of a paraffin base SAE 20 oil at 180.degree.F no sepn. occurs on cooling to 80.degree.F.

IC C10M

NCL 260404000

CC 51-7 (Fossil Fuels, Derivatives, and Related Products)

Section cross-reference(s): 46

ST alkoxyated fatty substrate solubilization; lubricating oil antioxidant **detergent**; phenol deriv solubilization lubricant additive

IT Lubricating oil additives

(antioxidants-**detergents**, alkoxyated fatty acid derivs., solubilization of)

IT 31587-81-2 52788-70-2

RL: PROC (Process)

(solubilization of, in lubricating oils by alkyl phenols)

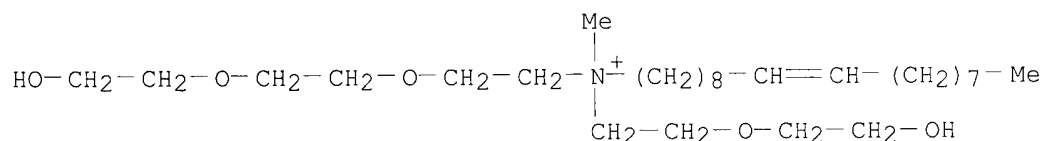
IT 52788-70-2

RL: PROC (Process)

(solubilization of, in lubricating oils by alkyl phenols)

RN 52788-70-2 HCA

CN 9-Octadecen-1-aminium, N-[2-[2-(2-hydroxyethoxy)ethoxy]ethyl]-N-[2-(2-hydroxyethoxy)ethyl]-N-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

=> d L54 1,3,5,7,9,11,13,15,17,19,21,23 cbib abs hitind hitstr

L54 ANSWER 1 OF 23 HCA COPYRIGHT 2003 ACS

133:22166 Cosmetics containing N-long chain acyl-amino acid esters. Ishii, Hiroji; Yumioka, Ryosuke; Koyama, Kyoko (Ajinomoto Co., Inc., Japan). Jpn. Kokai Tokkyo Koho JP 2000154112 A2 20000606, 34 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1999-146974 19990526. PRIORITY: JP 1998-150945 19980601.

AB The cosmetics, which have no sticky texture, show good hair-conditioning effect, and give smoothness to skin, contain (a) N-[C6-22 linear or branched (un)satd. acyl]-neutral amino acid C1-10 linear or branched (un)satd. hydrocarbyl esters and/or (b) N-[C6-22 linear or branched (un)satd. acyl]-acidic amino acid C1-10 linear or branched (un)satd. hydrocarbyl diesters and (c) surfactants as active ingredients. A **cleansing** foam contg. N-lauroylsarcosine iso-Pr ester 2, N-lauroylglutamic acid Na salt 20, 1,3-butylene glycol 50%, antiseptic, and H2O balance had no stickiness during and after the use.

IC ICM A61K007-00

ICS A61K007-02; A61K007-06; A61K007-075; A61K007-08; A61K007-42; A61K007-48; A61K007-50; C11D001-10

CC 62-4 (Essential Oils and Cosmetics)

ST long chain acyl neutral amino acid ester cosmetic; acidic amino acid long chain acyl diester hair conditioner; isopropyl lauroylsarcosinate surfactant **cleansing** cosmetic; glutamate diester cocoyl surfactant cosmetic; cocoylglutamate diester surfactant cosmetic

IT Cosmetics

(**cleansing**; cosmetics contg. N-long-chain acyl-neutral amino acid esters and/or N-long-chain acyl-acidic amino acid diesters and surfactants)

IT **Shampoos**

(conditioning; cosmetics contg. N-long-chain acyl-neutral amino acid esters and/or N-long-chain acyl-acidic amino acid diesters and surfactants)

IT **Soaps**

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(cosmetics contg. N-long-chain acyl-neutral amino acid esters and/or N-long-chain acyl-acidic amino acid diesters and surfactants)

IT Cosmetics

(foams, **cleansing**; cosmetics contg. N-long-chain acyl-neutral amino acid esters and/or N-long-chain acyl-acidic amino acid diesters and surfactants)

IT 56-41-7D, Alanine, N-cocoyl derivs., iso-Pr ester 56-86-0D, Glutamic acid, N-cocoyl or N-hydrogenated tallow fatty acyl derivs., diisopropyl esters 98-79-3D, Pyroglutamic acid, ester with polyoxyethylene hydrogenated castor oil monoisostearate 107-64-2, Distearyltrimethylammonium chloride 107-97-1D, Sarcosine, N-cocoyl derivs., iso-Pr ester 111-60-4, Ethylene glycol monostearate 112-03-8, Quaternary 86P Conc. 143-18-0, Potassium oleate 151-21-3, Sodium lauryl sulfate, biological studies 544-31-0, Palmitic acid monoethanolamide 593-29-3, Potassium stearate 627-83-8, Ethylene glycol distearate 1120-02-1, Stearyltrimethylammonium bromide 1323-39-3, Propylene glycol monostearate 1338-41-6, Sorbitan monostearate 2624-31-9, Potassium palmitate 4292-10-8, Softazoline LPB 7651-02-7 9004-82-4, Emal 20C 9004-95-9, Polyoxyethylene cetyl ether 9004-98-2, Polyoxyethylene oleyl ether 9004-99-3, Polyethylene glycol monostearate 9005-65-6, Polyoxyethylenesorbitan monooleate 9005-71-4, Polyoxyethylene sorbitan tristearate 9016-45-9, Polyoxyethylene nonylphenyl ether 9046-01-9,

Phosphanol RS 610 9087-53-0, Polyoxyethylene-polyoxypropylene cetyl ether 10124-65-9, Potassium laurate 12694-22-3, Diglyceryl monostearate 13429-27-1, Potassium myristate 16889-14-8 17301-53-0, Neoscoap CN 30SF 21539-58-2 25322-68-3D, ethers with phytosterol or lanolin alc. 25322-68-3D, hydrogenated castor oil derivs. 26636-40-8, Polyoxyethylene behenyl ether 26838-05-1, Disodium lauryl sulfosuccinate 27214-38-6, Glyceryl monomyristate 30399-84-9D, Isostearic acid, ester with polyoxyethylene hydrogenated castor oil monopyroglutamate 37230-97-0, Catinal HTB 70 41594-90-5 42926-22-7, Sodium N-lauroylglutamate 50940-13-1D, N-cocoyl derivs. 51033-38-6, Hexaglyceryl monolaurate 51852-65-4, Polyoxyethylene glyceryl monostearate 52315-75-0, Amihope LL 53026-27-0, Polyoxyethylene sorbitol tristearate 56827-95-3, Tripalmityl phosphate 58450-52-5, Kohacool L 300 61792-31-2, Softazoline LAO 66398-15-0 67450-05-9, Polypropylene glycol-succinic acid copolymer 67645-67-4 102051-00-3, Decaglyceryl trioleate **102847-97-2** 107615-45-2, Hexaglyceryl monomyristate 122636-91-3, Softazoline CPB 126449-40-9 130632-27-8, Potassium 2-heptylundecanoate 149779-14-6, CAE 158453-49-7, Cosmol 168AR 194797-04-1 194797-05-2 194797-08-5 194797-15-4 220505-72-6 230309-28-1 230309-33-8 230309-34-9 230309-35-0, N-Lauroylalanine tert-butyl ester 230309-38-3 230309-39-4 230309-41-8 230309-43-0 230972-53-9 230972-56-2 240492-41-5, Amilite ACT 12 259088-27-2 273200-32-1 273200-34-3 273200-36-5 273200-37-6 273214-33-8, Aminosoap AR 12 273214-35-0, Amilite GCK 12 273214-65-6, Softazoline CHR 273214-69-0, Softazoline NS-A 273214-70-3, Amisoft C 273215-12-6, Neoscoap SCN 35
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(cosmetics contg. N-long-chain acyl-neutral amino acid esters and/or N-long-chain acyl-acidic amino acid diesters and surfactants)

IT **102847-97-2**

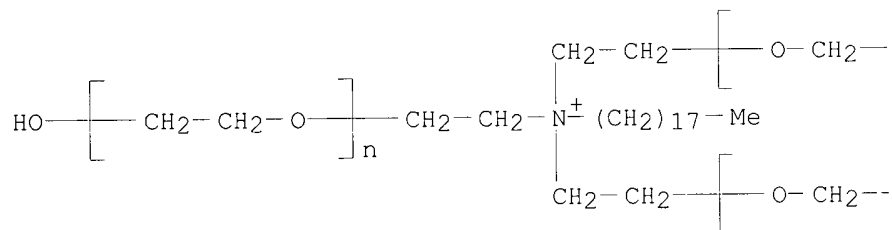
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(cosmetics contg. N-long-chain acyl-neutral amino acid esters and/or N-long-chain acyl-acidic amino acid diesters and surfactants)

RN 102847-97-2 HCA

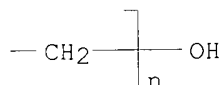
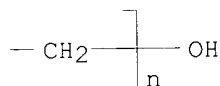
CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.,.alpha.''-[(octadecylnitrilio)tri-2,1-ethanediyl]tris[.omega.-hydroxy-, chloride (9CI) (CA INDEX NAME)

PAGE 1-A



● Cl⁻

PAGE 1-B



L54 ANSWER 3 OF 23 HCA COPYRIGHT 2003 ACS

130:85898 Conditioning **shampoos** containing anionic and cationic surfactant combinations. Nakamura, Hiroyuki; Shimada, Masahiko; Takeuchi, Kyu; Ujihara, Masaki (Nippon Oil and Fats Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 10316544 A2 19981202 Heisei, 21 pp. (Japanese). CODEN: JJKXAF. APPLICATION: JP 1997-139399 19970514.

AB **Shampoos** which exhibit little skin irritation and improved foam-ability and hair conditioning effects, comprise (1) sulfosuccinamide anionic surfactants, (2) ether sulfate, acyl alkyl taurate, acyl isethionate, or amido ether sulfate anionic surfactants, and (3) quaternary ammonium compd., isoquinolium salt, amidoquaternary ammonium cationic surfactants, where total amts. of (1) and (2) being 5-60 %, the wt. ratio of (1) to (2) being 1/20-20/1, and the content of (3) being 0.05-5 %. A **shampoo** contained N-cocoalkyl sulfosuccinamide K salt 7, Me(CH₂)₁₀CONMeCH₂CH₂SO₃Na 10, C₁₆H₃₃N+Me₃Cl⁻ 1, coco fatty acid diethanolamide 2, dimethyldiallylammonium chloride polymer 0.3, propylene glycol 1, methylparaben 0.2, butylparaben 0.2, perfumes 0.1, and distd. water 78.2 parts.

IC ICM A61K007-075

CC 62-3 (Essential Oils and Cosmetics)

ST conditioning **shampoo** cationic anionic surfactant combination

IT Surfactants

(anionic; conditioning **shampoos** contg. anionic and cationic
surfactant combinations)

IT Surfactants

(cationic; conditioning **shampoos** contg. anionic and cationic
surfactant combinations)

IT Shampoos

(conditioning; conditioning **shampoos** contg. anionic and cationic surfactant combinations)

IT 93-23-2 112-02-7 4316-74-9D, cocoacyl derivs. 4337-75-1 13150-00-0
51277-96-4 57267-78-4D, cocoacyl derivs. 138228-74-7D, cocoacyl
derivs. 151863-48-8D, cocoacyl derivs. 154482-47-0 158903-55-0D,
cocoacyl derivs. 193969-25-4D, cocoalkyl derivs. 218275-97-9
218275-98-0 218276-01-8 218276-03-0 218276-04-1 **218276-06-3**
218911-75-2 218911-76-3D, cocoalkyl derivs. 218911-77-4D, cocoalkyl
derivs. 218911-79-6 218911-80-9D, cocoalkyl derivs. 218911-82-1
218916-56-4D, cocoalkyl derivs.

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(conditioning **shampoos** contg. anionic and cationic surfactant combinations)

IT 218276-06-3

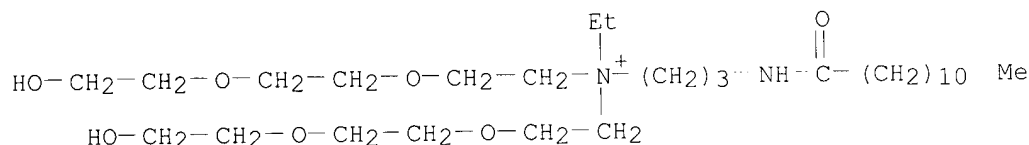
218278-08-3
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(conditioning **shampoos** contg. anionic and cationic surfactant combinations)

RN 218276-06-3 HCA
 CN 1-Propanaminium, N-ethyl-N,N-bis[2-[2-(2-hydroxyethoxy)ethoxy]ethyl]-3-[(1-oxododecyl)amino]-, ethyl sulfate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 218276-05-2
 CMF C29 H61 N2 O7



CM 2

CRN 48028-76-8
 CMF C2 H5 O4 S

Et-O-SO₃⁻

L54 ANSWER 5 OF 23 HCA COPYRIGHT 2003 ACS

128:184496 Conditioning **shampoo** compositions comprising polyalkoxylated polyalkyleneamine. Scheibel, Jeffrey; Uchiyama, Hirotaka; Yokogi, Junichi; Nakata, Mikiko; Sako, Takashi (Procter and Gamble Company, USA). PCT Int. Appl. WO 9804233 A1 19980205, 35 pp. DESIGNATED STATES: W: GB. (English). CODEN: PIXXD2. APPLICATION: WO 1996-US12518 19960731.

AB Disclosed are conditioning **shampoo** compns. comprising an alkoxyated polyalkyleneamine and one or more deterative surfactant; in further embodiments, air conditioning **shampoo** compn. comprising from about by wt. 0.01 % to about 10 % of an alkoxyated polyalkyleneamine, from about 0.01 % to about 20 % of a cationic surfactant conditioning agent, from about 5 % to about 50 % of a deterative surfactant, and from about 20 % to about 90 % of water. A **shampoo** contained ammonium laureth-3 sulfate 12.0, ammonium lauryl sulfate 4.0, dimethicone 1.25, cetyl alc. 0.42, stearyl alc. 0.18, polyethoxylated tetraethylenediamine 1, cocamide MEA 0.9, ethylene glycol distearate 2.0, fragrance 0.5, DMDM hydantoin 0.20, and water q.s. 100%.

IC ICM A61K007-075

CC 62-3 (Essential Oils and Cosmetics)

ST conditioning **shampoo** polyalkoxylated polyalkyleneamine surfactant

IT Surfactants

(cationic; conditioning **shampoo** compns. comprising polyalkoxylated polyalkyleneamine)

IT Quaternary ammonium compounds, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

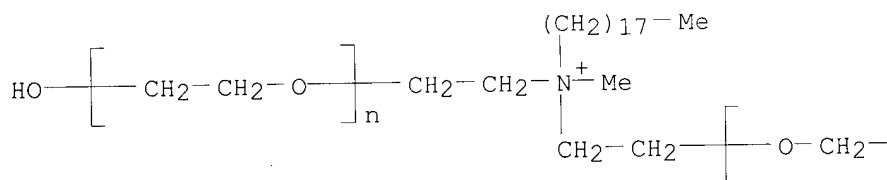
(coco alkylbis(hydroxyethyl)methyl, ethoxylated, chlorides; conditioning **shampoo** compns. comprising polyalkoxylated polyalkyleneamine)

IT Surfactants

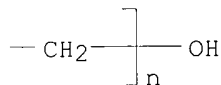
(conditioning **shampoo** compns. comprising polyalkoxylated polyalkyleneamine)

- IT **Shampoos**
 (conditioning; conditioning **shampoo** compns. comprising polyalkoxylated polyalkyleneamine)
- IT Polyoxyalkylenes, biological studies
 Polyoxyalkylenes, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (polyamine-; conditioning **shampoo** compns. comprising polyalkoxylated polyalkyleneamine)
- IT Polyamines
 Polyamines
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (polyoxyalkylene-; conditioning **shampoo** compns. comprising polyalkoxylated polyalkyleneamine)
- IT Quaternary ammonium compounds, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (tetraalkyl, coco alkylbis(hydroxyethyl)methyl, ethoxylated, Me sulfates (salts), Variquat K 1215; conditioning **shampoo** compns. comprising polyalkoxylated polyalkyleneamine)
- IT 2235-54-3, Ammonium lauryl sulfate **28724-32-5**, Ethoquad S 25
 32612-48-9, Ammonium laureth-3 sulfate
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (conditioning **shampoo** compns. comprising polyalkoxylated polyalkyleneamine)
- IT **28724-32-5**, Ethoquad S 25
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (conditioning **shampoo** compns. comprising polyalkoxylated polyalkyleneamine)
- RN 28724-32-5 HCA
 CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(methyloctadecyliminio)di-2,1-ethanediyl]bis[.omega.-hydroxy-, chloride (9CI) (CA INDEX NAME)]

PAGE 1-A

● Cl⁻

PAGE 1-B



L54 ANSWER 7 OF 23 HCA COPYRIGHT 2003 ACS

121:286329 **Detergent** mixtures for use in hair fixatives. Hensen, Hermann; Tesmann, Holger; Kahre, Joerg; Mueller, Reinhard; Scholz, Wolfhard (Henkel K.-G.a.A., Germany). Ger. Offen. DE 4309567 A1 19940929, 11 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1993-4309567 19930324.

AB **Detergent** mixts. contg. a polyhydroxy fatty acid amide R1C(O)N(R2)Z [R1C(O) = C6-22 aliph. acyl; R2 = H, C1-4 (hydroxy)alkyl; Z = C3-10 alkyl bearing 3-10 OH groups], a protein hydrolyzate (mean mol. wt. 1000-10,000), and optionally a monomeric cationic surfactant, used in hair fixatives, confer good flexibility on the hair, are dermatol. compatible and biodegradable, and are readily removed by rinsing or brushing. Thus, a hair fixative soln. contained C12-14 coco fatty acid N-methylglucamide 6.0, soybean protein hydrolyzate (mol. wt. .apprx.4800) 3.8, 96% EtOH 30.0, Dehyquart SP 1.0, and water to 100.0 wt.%.
 ICM B01F017-00
 ICS A61K007-11; A61K007-08
 ICA B01F017-22; B01F017-30; B01F017-18
 CC 62-3 (Essential Oils and Cosmetics)
 ST hydroxy fatty amide **detergent** hair fixative; protein hydrolyzate **detergent** hair fixative

ICM B01F017-00

ICS A61K007-11; A61K007-08

ICA B01F017-22; B01F017-30; B01F017-18

CC 62-3 (Essential Oils and Cosmetics)

ST hydroxy fatty amide **detergent** hair fixative; protein hydrolyzate **detergent** hair fixative

IT **Detergents**

(detergent mixts. for use in hair fixatives)

IT Protein hydrolyzates

Quaternary ammonium compounds, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(detergent mixts. for use in hair fixatives)

IT Plant

(protein enzymic hydrolyzates from; **detergent** mixts. for use in hair fixatives)

IT Amides, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(fatty, polyhydroxy, **detergent** mixts. for use in hair fixatives)

IT Hair preparations

(fixatives, **detergent** mixts. for use in hair fixatives)

IT 58069-11-7, Dehyquart SP

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(detergent mixts. for use in hair fixatives)

IT 58069-11-7, Dehyquart SP

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(detergent mixts. for use in hair fixatives)

RN 58069-11-7 HCA

CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.',.alpha.''-

[(octadecylnitrilio)tri-2,1-ethanediyl]tris[.omega.-hydroxy-, phosphate

(1:1) (salt) (9CI) (CA INDEX NAME)

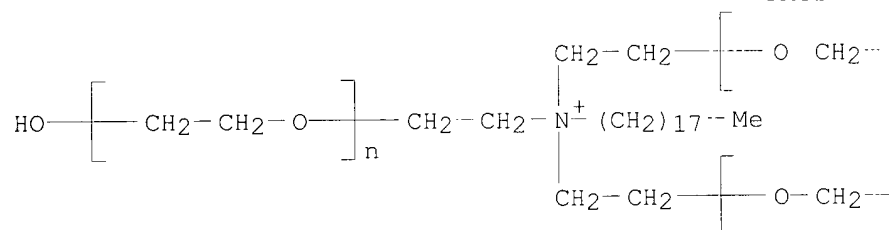
CM 1

CRN 58069-10-6

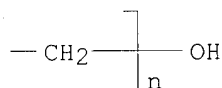
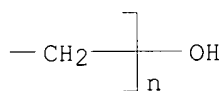
CMF (C2 H4 O)n (C2 H4 O)n (C2 H4 O)n C24 H52 N O3

CCI PMS

PAGE 1-A



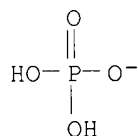
PAGE 1-B



CM 2

CRN 14066-20-7

CMF H2 O4 P



L54 ANSWER 9 OF 23 HCA COPYRIGHT 2003 ACS

120:86076 Surfactants and conditioning agents for cosmetic **cleansers**

. Shimada, Masahiko; Chikuma, Takako; Murata, Junko (Nippon Oils & Fats Co Ltd, Japan). Jpn. Kokai Tokkyo Koho JP 05246829 A2 19930924 Heisei, 16 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1992-83156 19920305.

AB Cosmetic **cleansers**, esp. **shampoos**, comprise (1) acylalkyltaurine anionic surfactants, (2) amidoamino acid amphoteric surfactants, (3) betaine amphoteric surfactants, (4) cationic surfactants, and (5) cationic polymers. The **cleansers** are mild to use and stable for storage and show conditioning effects. For example, a **shampoo** contained N-cocoyl-N-methyltaurine Mg salt 5, XNHCH₂CH₂N(CH₂CH₂OH)(CH₂CO₂M) (X = coco acyl, M = triethanolammonium) 7, cocoylalkyldimethylamino acetate betaine 3, N+RR₁R₂R₃Y- (R = stearyl, R₁-R₃ = Me, Y = F) 1, Gafquat 734 1, ethylene glycol distearate 2, jojoba

oil 0.2, methylparaben 0.2, butylparaben 0.2, citric acid 0.5, perfume 0.1
and distd. water to 100.0%.

IC ICM A61K007-075
ICS C11D001-94

ICI C11D001-94, C11D001-28, C11D001-52, C11D001-62, C11D001-10, C11D003-37,
C11D001-90

CC **62-3** (Essential Oils and Cosmetics)

ST cosmetic **cleanser** surfactant cationic polymer; **shampoo**
cationic amphoteric anionic surfactant

IT Cosmetics
(**cleansing**, anionic and amphoteric and cationic surfactant
combinations for)

IT **Shampoos**
(conditioning, anionic and amphoteric and cationic surfactant
combinations for)

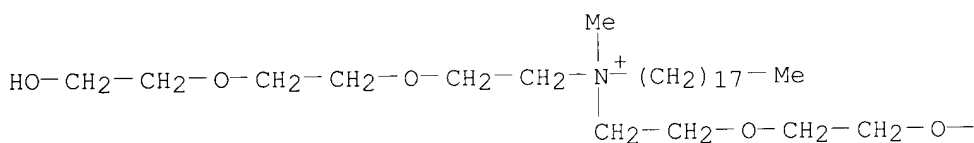
IT 112-03-8, Stearyltrimethylammonium chloride 683-10-3, Betaine
lauryldimethylaminoacetate 2601-33-4 4316-74-9D, Sodium
N-methyltaurine, N-coco acyl derivs. 4337-75-1, N-Lauroyl-N-
methyltaurine sodium salt 23289-80-7D, N-coco acyl derivs. 25729-05-9
36574-66-0D, N-coco acyl derivs. 49718-29-8, Marcoat 100 51876-24-5
53633-54-8, Gafquat 734 66161-62-4 75400-75-8D, N-coco acyl derivs.
94087-04-4 127666-00-6 151843-07-1D, N-coco acyl derivs.
151863-34-2 151863-35-3 151863-37-5 151863-39-7
151863-40-0 151863-42-2 151863-43-3D, N-coco acyl derivs.
151863-45-5 151863-47-7 151863-48-8D, N-coco acyl derivs.
151863-49-9 151863-50-2D, N-coco acyl derivs. 152478-27-8, Jellner QH
300 152478-31-4, Marcoat 550
RL: BIOL (Biological study)
(cosmetic **cleansers** contg.)

IT **151863-34-2 151863-35-3**
RL: BIOL (Biological study)
(cosmetic **cleansers** contg.)

RN 151863-34-2 HCA

CN 1-Octadecanaminium, N,N-bis[2-[2-(2-hydroxyethoxy)ethoxy]ethyl]-N-methyl-,
chloride (9CI) (CA INDEX NAME)

PAGE 1-A

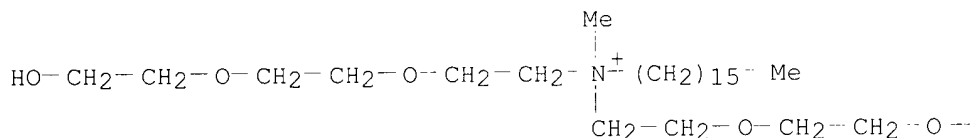
● Cl⁻

PAGE 1-B

—CH₂—CH₂—OH

RN 151863-35-3 HCA
 CN 1-Hexadecanaminium, N,N-bis[2-[2-(2-hydroxyethoxy)ethoxy]ethyl]-N-methyl-,
 bromide (9CI) (CA INDEX NAME)

PAGE 1-A

● Br⁻

PAGE 1-B

—CH₂—CH₂—OH

L54 ANSWER 11 OF 23 HCA COPYRIGHT 2003 ACS

118:11519 Liquid skin **cleansers** containing higher fatty acids and cationic surfactants, amine oxides, and/or (alkylamino)propionic acids. Takada, Juichi; Nishimura, Eiji; Yanaba, Shigeru (Lion Corp., Japan). Jpn. Kokai Tokkyo Koho JP 04234312 A2 19920824 Heisei, 5 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1990-418331 19901227.

AB Liq. skin **cleansers**, which show good foaming property and stability, contain .gtoreq.1 compds. chosen from higher fatty acid K salts and triethanolamine salts and .gtoreq.1 compds. chosen from R1R2R3R4N+C1- [R1 = C8-18 alkyl or alkenyl; R2-4 = H, C1-3 alkyl, (CH2CH2O)nH; n = 1-5], R5R6R7NO [R5 = C8-18 alkyl or alkenyl; R6, R7 = H, C1-3 alkyl, (CH2CH2O)nH; n = 1-5], and R8NHCH2CH2CO2H (R8 = C8-18 alkyl or alkenyl). Skin **cleanser** comprised coconut oil fatty acid K salt 5.0, K myristate 5.0, lauryltrimethylammonium chloride 1.0, coconut oil fatty acid diethanolamide 1.0, propylene glycol 3.0, EDTA.4Na 0.1, fragrances 1.0, and H2O to 100 wt.%.

IC ICM A61K007-50
 ICS C11D010-04

ICI C11D010-04, C11D001-62; C11D010-04, C11D001-75; C11D010-04, C11D001-90

CC 62-4 (Essential Oils and Cosmetics)

ST skin **cleanser** fatty acid salt; amine oxide skin **cleanser** ; alkylaminopropionate skin **cleanser**

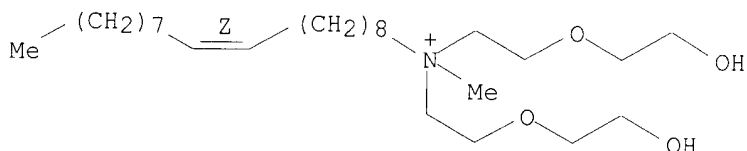
IT Surfactants
 (cationic, ammonium chlorides, skin **cleansers** contg. higher fatty acid salts and)

IT Cosmetics
 (**cleansing**, contg. fatty acid salts and cationic surfactants and amine oxides and (alkylamino)propionic acids)

IT Fatty acids, compounds
 RL: BIOL (Biological study)
 (coco, compds., with triethanolamine, skin **cleansers** contg.)

- cationic surfactants and amine oxides and (alkylamino)propionic acids and)
- IT Quaternary ammonium compounds, compounds
RL: BIOL (Biological study)
(coco alkylbis(hydroxyethyl)methyl, ethoxylated, chlorides, skin **cleansers** contg. higher fatty acid salts and)
- IT Amines, oxides
RL: BIOL (Biological study)
(coco alkyltrimethyl, N-oxides, skin **cleansers** contg. higher fatty acid salts and)
- IT Fatty acids, compounds
RL: BIOL (Biological study)
(coco, potassium salts, skin **cleansers**, contg. cationic surfactants and amine oxides and (alkylamino)propionic acids and)
- IT 13429-27-1, Myristic acid potassium salt 41669-40-3, Myristic acid triethanolamine salt
RL: BIOL (Biological study)
(skin **cleansers** contg. cationic surfactants and amine oxides and (alkylamino)propionic acids and)
- IT 107-64-2, Distearyltrimethylammonium chloride 107-95-9D, .beta.-Aminopropionic acid, N-coco alkyl derivs. 112-00-5, Lauryltrimethylammonium chloride 3332-27-2, Myristyltrimethylamine oxide **61261-70-9**
RL: BIOL (Biological study)
(skin **cleansers** contg. higher fatty acid salts and)
- IT **61261-70-9**
RL: BIOL (Biological study)
(skin **cleansers** contg. higher fatty acid salts and)
- RN 61261-70-9 HCA
- CN 9-Octadecen-1-aminium, N,N-bis[2-(2-hydroxyethoxy)ethyl]-N-methyl-, chloride, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

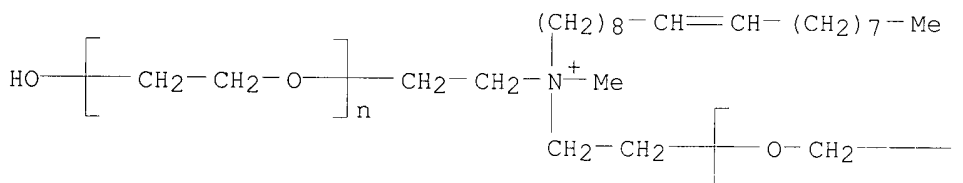


● Cl⁻

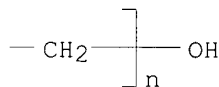
- L54 ANSWER 13 OF 23 HCA COPYRIGHT 2003 ACS
- 117:157387 Manufacture of **shampoos** containing plant proteins. Yoshioka, Masato; Kamimura, Yoichi (Seiwa Kasei K. K., Japan). Jpn. Kokai Tokkyo Koho JP 04139115 A2 19920513 Heisei, 20 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1990-259255 19900927.
- AB A **shampoo** is prepd. consisting of a plant protein deriv., an amino acid anionic surfactant, a cationic surfactant (or cationic polymer). The plant protein deriv. (.gtoreq. 1) is selected from 4 groups of peptides (Markush structures given). General structures of the surfactants are also disclosed with Markush structures. The **shampoo** prevents hair damages and conditions the hair. A **shampoo** contained soybean protein deriv. 0.8, Na N-lauryl-L-glutamate 16.0, cetyltrimethylammonium chloride (29%) 1.2,

- coconut oil fatty acid diethanolamide 2.8, cetyl alc. 1.0, olive oil 0.8, 4-hydroxybenzoate-phenoxy alc. mixt. 0.5, perfume q.s., citrate q.s., and water to 100 % by wt.
- IC ICM A61K007-075
ICS A61K007-06; C11D001-65; C11D003-382
- ICI C11D001-65, C11D001-10, C11D001-62
- CC 62-3 (Essential Oils and Cosmetics)
- ST **shampoo** plant protein deriv surfactant; soybean protein surfactant **shampoo**
- IT **Shampoos**
(plant protein derivs. and surfactants for)
- IT Siloxanes and Silicones, biological studies
RL: BIOL (Biological study)
(**shampoo** manuf. with protein derivs. and)
- IT Proteins, specific or class
RL: BIOL (Biological study)
(soybean, derivs., **shampoo** manuf. with)
- IT Surfactants
(anionic, **shampoo** manuf. with protein derivs. and)
- IT Polyelectrolytes
Surfactants
(cationic, **shampoo** manuf. with protein derivs. and)
- IT 112-02-7, Cetyltrimethylammonium chloride 122-19-0, Stearyldimethylbenzylammonium chloride 151-21-3, Sodium lauryl sulfate, biological studies 9004-62-0, Hydroxyethyl cellulose 16889-14-8, 17301-53-0, Behenyltrimethylammonium chloride 21539-58-2 26062-79-3, Dimethyldiallylammonium chloride polymer **28880-55-9** 30364-51-3, 37139-99-4 98984-78-2, Monosodium N-lauryl-L-glutamate
RL: BIOL (Biological study)
(**shampoo** manuf. with protein derivs. and)
- IT **28880-55-9**
RL: BIOL (Biological study)
(**shampoo** manuf. with protein derivs. and)
- RN 28880-55-9 HCA
- CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[[methyl-(9Z)-9-octadecenyliminio]di-2,1-ethanediyl]bis[.omega.-hydroxy-, chloride (9CI)
(CA INDEX NAME)

PAGE 1-A

● Cl⁻

PAGE 1-B

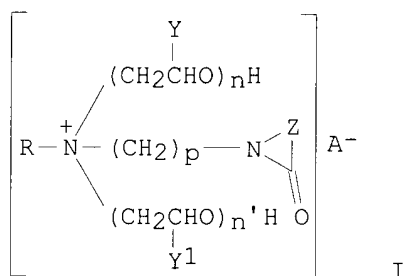


L54 ANSWER 15 OF 23 HCA COPYRIGHT 2003 ACS

114:253853 Preparation of quaternized ammonium compounds for cosmetics.

Chaudhuri, Ratan K.; Tracy, David J.; Login, Robert B. (GAF Chemicals Corp., USA). PCT Int. Appl. WO 9015797 A2 19901227, 18 pp. DESIGNATED STATES: W: AU, JP; RW: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE. (English). CODEN: PIXXD2. APPLICATION: WO 1990-US3258 19900614. PRIORITY: US 1989-370226 19890622.

GI



AB The quaternized N compds. I (Y, Y¹ = H, Me; R = alkyl, alkenyl, amidoalkyl; Z = alkylene; A⁻ = anion; n, n' = 1-25; p = 104) are prepd. as softening, moisturizing, and antistatic agents for skin and hair cosmetics. Bis(2-hydroxyethyl)[(2-pyrrolidonyl)methyl]tallow ammonium chloride was prepd. by the reaction of bis(2-hydroxyethyl)tallow amine with N-chloromethyl-2-pyrrolidone. **Shampoo**, hair conditioner, or moisturizing lotion formulations contg. I are given.

IC C07D207-20; C07D213-64; C07D223-01; C07D225-02

CC **62-4** (Essential Oils and Cosmetics)

Section cross-reference(s): 27

IT Cosmetics

Hair preparations

Shampoos

(softening agents for, quaternary ammonium compds. as)

IT **134035-54-4P**

RL: PREP (Preparation)

(prepn. of, as softening agent for cosmetics)

IT **134148-79-1P**

RL: PREP (Preparation)

(prepn. of, as softening agent, for cosmetics)

IT **134035-54-4P**

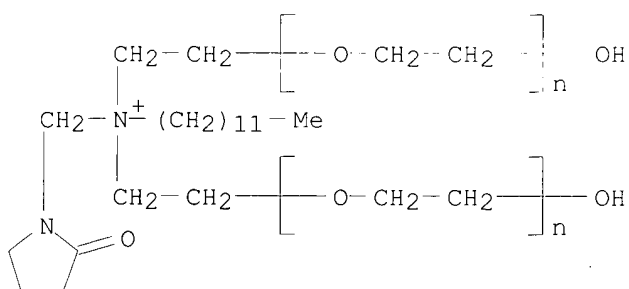
RL: PREP (Preparation)

(prepn. of, as softening agent for cosmetics)

RN 134035-54-4 HCA

CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[[dodecyl[(2-oxo-1-

pyrrolidiny]methyl]iminio]di-2,1-ethanediyl]bis[.omega.-hydroxy-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

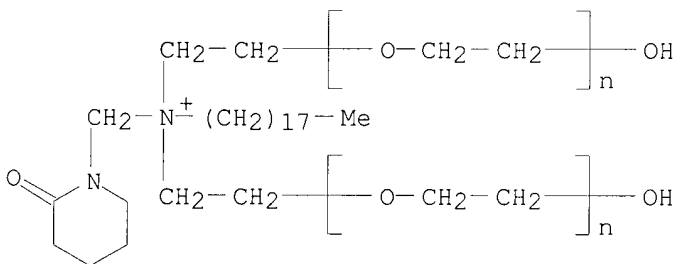
IT 134148-79-1P

RL: PREP (Preparation)

(prepn. of, as softening agent, for cosmetics)

RN 134148-79-1 HCA

CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[[octadecyl[(2-oxo-1-piperidiny]methyl]iminio]di-2,1-ethanediyl]bis[.omega.-hydroxy-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

L54 ANSWER 17 OF 23 HCA COPYRIGHT 2003 ACS

107:140875 **Shampoos** containing quaternary ammonium salts and anionic surfactants. Suzuki, Naoki (Lion Corp., Japan). Jpn. Kokai Tokkyo Koho JP 62126113 A2 19870608 Showa, 8 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1985-267770 19851128.

AB **Shampoos** contain (1) 0.1-5.0% by wt. at least one quaternary ammonium salt of (NR1R2R3R4)⁺.cntdot. X⁻ (R1 and R2 = C14-24 alkyl or alkenyl; R3 and R4 = Me, Et, polyoxyethylene, or polyoxypropylene; X⁻ = anion) (I values, 35-100), and (2) 5-25% by wt. at least one anionic surfactant selected from the group consisting of R(OR5)nOS3M/m, RSO3M/m, and OSM/m (R = C8-18 alkyl- or C6-15 alkyl-substituted alkylphenyl; R5 = C2-3 alkylene; n = 0-6; OS = acid anion activator obtained by sulfonating C10-18 olefins; M = alkali metal ion, alk. earth metal ion, org. amine, and org. ammonium ion; m = valence of base M). These **shampoos** are effective in maintaining natural luster in the hair. Thus, a

shampoo was prepd. consisting of ethoxysulfate C12-13 aliph. alc. ester Na salt 15, dioleyldimethylammonium chloride (I value, 40) 0.5, and H2O to 100% by wt.

IC ICM A61K007-075

CC **62-3** (Essential Oils and Cosmetics)

ST **shampoo** surfactant ammonium salt

IT **Shampoos**
(anionic surfactants and quaternary ammonium salts in)

IT Palm oil
Rape oil
Safflower oil
Soybean oil
RL: BIOL (Biological study)
(compds. with ammonium salts, **shampoos** contg. surfactants and)

IT Imidazolium compounds
RL: BIOL (Biological study)
(1-[2-(carboxymethoxy)ethyl]-1-(carboxymethyl)-4,5-dihydro-2-norcoco alkyl, hydroxides, inner salts, **shampoos** contg. quaternary ammonium salts and)

IT 107-64-2, Distearyltrimethylammonium chloride 7212-69-3,
Dioleyldimethylammonium chloride **28724-32-5** 110343-68-5
RL: BIOL (Biological study)
(**shampoos** contg. anionic surfactants and)

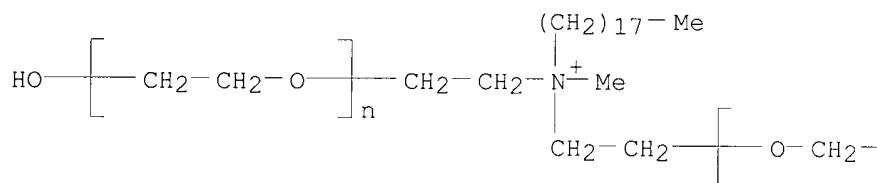
IT 139-96-8, Triethanolamine lauryl sulfate 151-21-3, uses and
miscellaneous 13502-13-1 34503-11-2D, C12-13 alkyl derivs.
74974-29-1 110341-25-8D, C12-13 alkyl derivs.
RL: BIOL (Biological study)
(**shampoos** contg. quaternary ammonium salts and)

IT **28724-32-5**
RL: BIOL (Biological study)
(**shampoos** contg. anionic surfactants and)

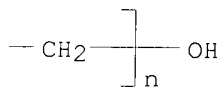
RN 28724-32-5 HCA

CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(methyloctadecyliminio)di-2,1-ethanediyl]bis[.omega.-hydroxy-, chloride (9CI) (CA INDEX NAME)

PAGE 1-A

● Cl⁻

PAGE 1-B



L54 ANSWER 19 OF 23 HCA COPYRIGHT 2003 ACS

101:177236 Hygienic assessment of home-use chemical agents based on surface-active substances. Iordanova, I.; Bainova, A.; Tsankov, Yu.; Lolova, D. (MA, Sofia, Bulg.). Khigiena i Zdraveopazvane, 27(2), 130-6 (Bulgarian) 1984. CODEN: KHZDAN. ISSN: 0018-8247.

AB Anionic surfactant Penitel V-8 [a mixt. of Metaupon (oleylmethyl tauride) and di-Na sulfosuccinate monoester] [92529-43-6] (for **shampoo** manuf.) and cationic surfactants, Genamin DSAC [107-64-2], Dehyquart A [112-02-7], and Dehyquart SP [58069-11-7] (for the manuf. of hair balsams and conditions) in concd. solns. were moderate skin irritants and weak allergens in rabbits and guinea pigs. They were well tolerated by humans in dild. solns. The surfactants were approved for the cosmetic uses at .gtoreq.1% concns.

CC 62-1 (Essential Oils and Cosmetics)

IT Cosmetics

Hair preparations

Shampoos

(surfactants for, allergenicity and skin irritancy of)

IT 107-64-2 112-02-7 **58069-11-7** 92529-43-6

RL: BIOL (Biological study)

(for cosmetics, allergenicity and skin irritancy of)

IT **58069-11-7**

RL: BIOL (Biological study)

(for cosmetics, allergenicity and skin irritancy of)

RN 58069-11-7 HCA

CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.',.alpha.''-[(octadecylnitrilio)tri-2,1-ethanediyl]tris[.omega.-hydroxy-, phosphate (1:1) (salt) (9CI) (CA INDEX NAME)

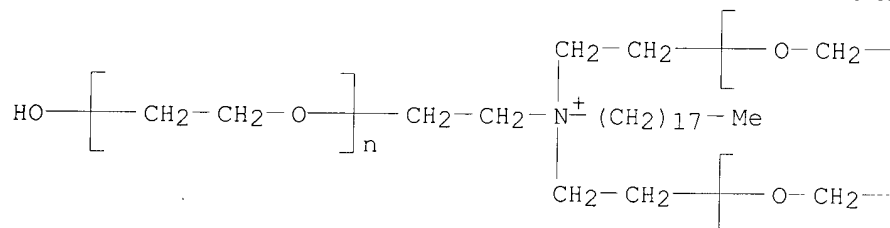
CM 1

CRN 58069-10-6

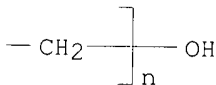
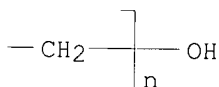
CMF (C2 H4 O)n (C2 H4 O)n (C2 H4 O)n C24 H52 N O3

CCI PMS

PAGE 1-A



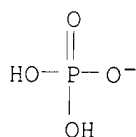
PAGE 1-B



CM 2

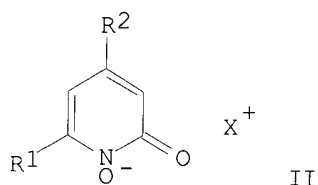
CRN 14066-20-7

CMF H2 O4 P



L54 ANSWER 21 OF 23 HCA COPYRIGHT 2003 ACS
 100:56680 **Shampoos** containing surfactants and pyridones. (Lion Corp., Japan). Jpn. Kokai Tokkyo Koho JP 58040397 A2 19830309 Showa, 7 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1981-139354 19810904.

GI

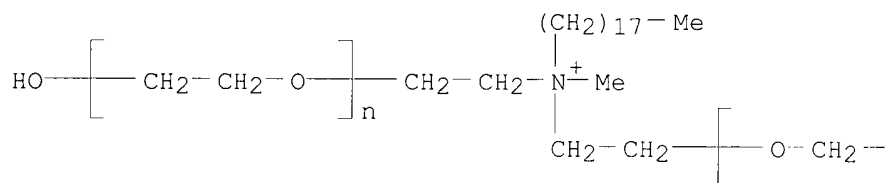


AB **Shampoos**, which are also effective hair conditioners, comprise anionic surfactants 3-30, cationic surfactants R1R2N+[(CH2CH2O)nH](CH2CH2O)mH X- (I) (R1 = C16-22 alkyl; R2 = C1-22 alkyl; X = halogen or alkyl sulfate; m and n = integer where m + n = 5 .apprx.30) 0.1-5.0, and II (R1 = C1-17 alkyl, C2-17 alkenyl, etc.; R2 = H, C1-4 alkyl, C2-4 alkenyl, etc.; X = amine residue) 0.1-10%. Thus, a **shampoo** contains an ethoxylated C12-13 aliph. alc. sulfate Na salt (anionic surfactant) 15.0, I (R1 = Me, R2 = stearyl; n + m = 15, X = Cl) [28724-32-5] 1.0, II (R1 = CH2CHMeCH2CMe3, R2 = Me, X = H3N+CH2CH2OH) [87237-38-5] 1.0, and water to 100 % by wt.

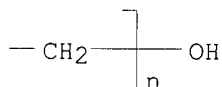
IC C11D001-65; A61K007-06; C11D003-28
 ICI C11D001-65, C11D001-62
 CC 62-3 (Essential Oils and Cosmetics)
 ST **shampoo** surfactant pyridone; polyoxyethylene quaternary ammonium **shampoo**
 IT **Shampoos**
 (pyridones and surfactants for)
 IT Quaternary ammonium compounds, biological studies

RL: BIOL (Biological study)
 (shampoos contg. pyridones and)
 IT 2787-53-3 **28724-32-5** 55907-32-9 **87672-05-7**
 RL: BIOL (Biological study)
 (shampoos contg. pyridones and)
 IT 9004-82-4 27028-82-6
 RL: BIOL (Biological study)
 (shampoos contg. quaternary ammonium surfactants and)
 IT 87237-36-3 87237-38-5
 RL: BIOL (Biological study)
 (shampoos contg. surfactants and)
 IT **28724-32-5 87672-05-7**
 RL: BIOL (Biological study)
 (shampoos contg. pyridones and)
 RN 28724-32-5 HCA
 CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(methyloctadecyliminio)di-2,1-ethanediyl]bis[.omega.-hydroxy-, chloride (9CI) (CA INDEX NAME)

PAGE 1-A

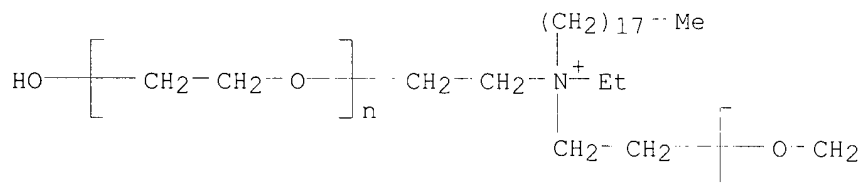
● Cl⁻

PAGE 1-B

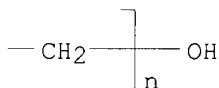


RN 87672-05-7 HCA
 CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(ethyloctadecyliminio)di-2,1-ethanediyl]bis[.omega.-hydroxy-, chloride (9CI) (CA INDEX NAME)

PAGE 1-A

● Cl⁻

PAGE 1-B



L54 ANSWER 23 OF 23 HCA COPYRIGHT 2003 ACS

84:79587 Hair conditioners. How they are compounded and how they work.

Kroke, Hermann (Henkel und Cie. C.m.b.H., Duesseldorf, Fed. Rep. Ger.).
Cosmetics and Perfumery, 90(11), 31-2, 34 (English) 1975. CODEN: CSPEAX.
ISSN: 0090-6581.

AB Dehyquart SP [58069-11-7] [Me(CH₂)₁₆CH₂N+[(CH₂CH₂O)_xH][(CH₂CH₂O)_yH](CH₂CH₂O)_zH₂PO₄-] was found to be good **shampoo** component with good soly., good conditioning and antistatic effect, and very low skin irritation. A "two tier" hair washing test was proposed with 1/2 of the hair tested with a formulation contg. Dehyquart SP and the other half against a std. formulation. Foam properties and hair gloss and body were evaluated.

CC 62-3 (Essential Oils and Cosmetics)

ST hair conditioner evaluation; polyoxyethylene ammonium **shampoo**IT **Shampoos**

(formulation and evaluation of)

IT 58069-11-7

RL: BIOL (Biological study)

(hair conditioners and **shampoos** contg.)

IT 58069-11-7

RL: BIOL (Biological study)

(hair conditioners and **shampoos** contg.)

RN 58069-11-7 HCA

CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.,.alpha.''-
[(octadecylnitrilio)tri-2,1-ethanediyl]tris[.omega.-hydroxy-, phosphate
(1:1) (salt) (9CI) (CA INDEX NAME)

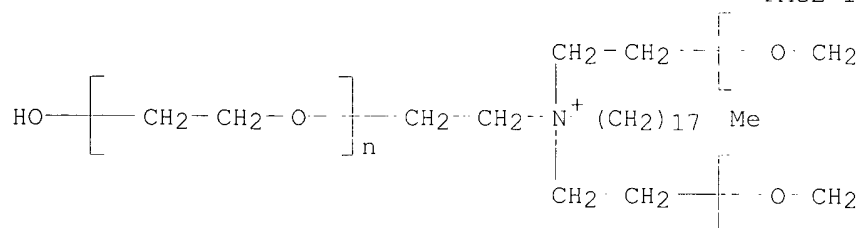
CM 1

CRN 58069-10-6

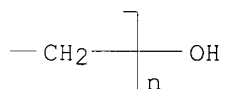
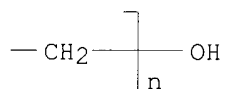
CMF (C₂ H₄ O)_n (C₂ H₄ O)_n (C₂ H₄ O)_n C₂₄ H₅₂ N O₃

CCI PMS

PAGE 1-A



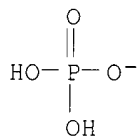
PAGE 1-B



CM 2

CRN 14066-20-7

CMF H2 O4 P



=> d L67 1-6 cbib abs hitind hitstr

L67 ANSWER 1 OF 6 HCA COPYRIGHT 2003 ACS

136:183278 Compositions for delivering moisture to plants and soils.

Hamersky, Mark William; Smith, Steven Daryl (The Procter & Gamble Company, USA). PCT Int. Appl. WO 2002015687 A2 20020228, 20 pp. DESIGNATED

STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2.

APPLICATION: WO 2001-US25979 20010820. PRIORITY: US 2000-PV226741 20000821; US 2001-PV287139 20010427; US 2001-891476 20010626.

AB Compns. are given which provide dry soils, plants, or both, with moisture. The compns. can be used as the sole source of moisture for a growing plant or as an adjunct source during periods of diminished watering. The compns. are particularly well suited for use in household and potted plant applications. The compns. include an active ingredient selected from the group consisting of a polymer, a surfactant, and combinations thereof.

IC ICM A01N

CC 19-11 (Fertilizers, Soils, and Plant Nutrition)

IT 9000-11-7, Carboxymethylcellulose 9002-89-5 9003-01-4, Polyacrylic acid 9003-39-8, PVP 9004-62-0, Hydroxyethylcellulose 25154-86-3, Polydimethylaminoethylmethacrylate 25322-68-3, Polyethylene glycol 50851-57-5 106392-12-5, Pluronic 25R2 107397-59-1, Tetronic 90R4 156028-14-7, Miranol Ultra L 32

RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses) (compns. for delivering moisture to plants and soils contg.)

IT 107397-59-1, Tetronic 90R4

RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses) (compns. for delivering moisture to plants and soils contg.)

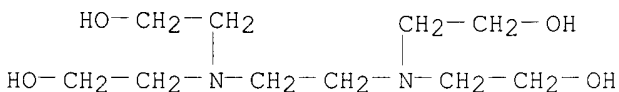
RN 107397-59-1 HCA

CN Oxirane, methyl-, polymer with oxirane, ether with 2,2',2'',2'''-(1,2-ethanediyldinitrilo)tetrakis[ethanol] (4:1), block (9CI) (CA INDEX NAME)

CM 1

CRN 140-07-8

CMF C10 H24 N2 O4



CM 2

CRN 106392-12-5

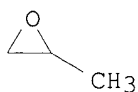
CMF (C3 H6 O . C2 H4 O)x

CCI PMS

CM 3

CRN 75-56-9

CMF C3 H6 O



CM 4

CRN 75-21-8

CMF C2 H4 O



L67 ANSWER 2 OF 6 HCA COPYRIGHT 2003 ACS

131:159433 Composition and methods for firefighting hydrocarbon fires. Thames, Ronald E. (Hazard Control Technologies, Inc., USA). U.S. US 5945026 A 19990831, 10 pp., Cont.-in-part of U.S. Ser. No. 334,403, abandoned. (English). CODEN: USXXAM. APPLICATION: US 1997-832063 19970402. PRIORITY: US 1994-334403 19941104.

AB A biodegradable, non-toxic firefighting conc. compn. has a preferred compn. of an ethoxylated (d.p. 2-10) C16-18-tertiary amine 4-40, a C6-16-carboxylic acid 1-15, a C6-16-alc. 1-6, and a C1-4-alc. 0-10 vol. parts, and enough water to create a total of 100 (vol.) parts. The conc., which is typically dild. up to 100 (vol.) times with water, is also effective when mixed with foam-forming materials. In addn., the compn. is useful with soil bacteria for remediating soils contaminated with hydrocarbon fuels (esp. gasoline and diesel fuel spills) and for facilitating fuel dispersion and degrdn. within bacterial-type sewage systems. The compn. includes ethoxylated tallow or coco alkyl amines, a betaine (e.g., coco alkylaminodipropyl betaine), a preservative [esp. sodium bis(2-ethylhexyl)sulfosuccinate], a biocide, a dye, and a higher alc. (e.g., a mixt. of 1-octanol and 1-decanol).

IC ICM A62D001-04
ICS A62C008-00; A62C035-00

NCL 252008050

CC 50-6 (Propellants and Explosives)
Section cross-reference(s): 19, 51, 61

IT 92488-83-0

RL: TEM (Technical or engineered material use); USES (Uses)
(compns. contg.; biodegradable non-toxic fire fighting concs. for
extinguishing hydrocarbon fires and remediation of oil spills)

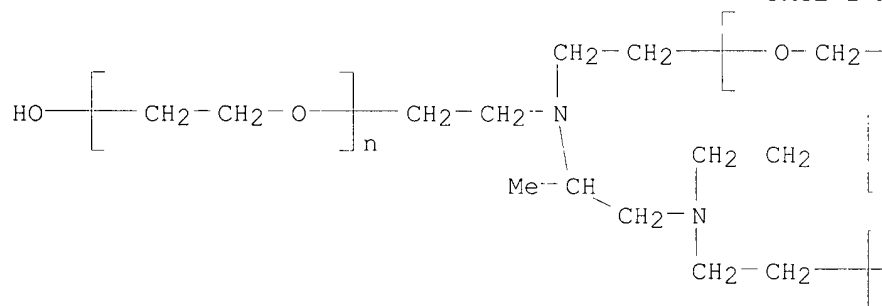
IT 92488-83-0

RL: TEM (Technical or engineered material use); USES (Uses)
(compns. contg.; biodegradable non-toxic fire fighting concs. for
extinguishing hydrocarbon fires and remediation of oil spills)

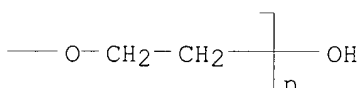
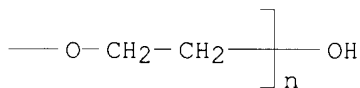
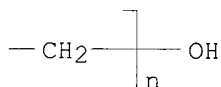
RN 92488-83-0 HCA

CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.',.alpha.',.alpha.''-[(1-methyl-1,2-ethanediyl)bis(nitrilodi-2,1-ethanediyl)]tetrakis[.omega.-hydroxy-(9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

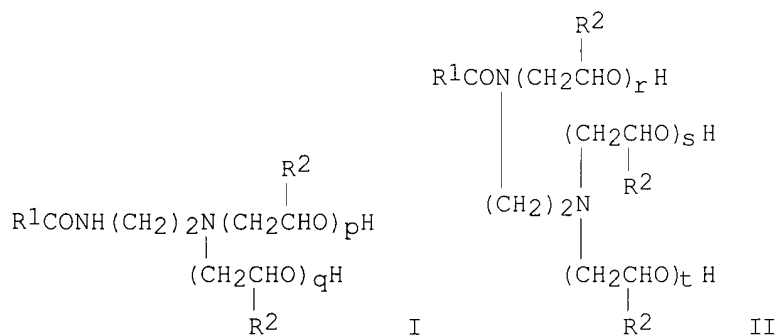


L67 ANSWER 3 OF 6 HCA COPYRIGHT 2003 ACS

126:159033 Surfactant composition containing polyalkoxylated amidoamines.

Mercier, Jean-Michel; Ricca, Jean-Marc (Rhone-Poulenc Chimie, Fr.;
 Mercier, Jean-Michel; Ricca, Jean-Marc). PCT Int. Appl. WO 9700126 A1
 19970103, 47 pp. DESIGNATED STATES: W: AL, AU, BB, BG, BR, CA, CN, CZ,
 EE, GE, HU, IL, IS, JP, KP, KR, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ,
 PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU,
 TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA,
 GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (French).
 CODEN: PIXXD2. APPLICATION: WO 1996-FR909 19960614. PRIORITY: FR
 1995-7178 19950614.

GI



AB A surfactant compn. contains a mixt. of polyalkoxylated amidoamines having av. formulas (I) and (II) (each R1 is independently a C2-22 hydrocarbon group, straight or branched alkyl or alkenyl, cycloalkyl or alkylaryl; each R2 is independently H or a C1-4 alkyl radical, and p, q, r, s and t (which are the same or different) are integers or fractional nos. from 1 to 50, particularly 1.1 to 25 and preferably 2 to 20). The compn. is suitable as a detergent, particularly in cosmetics, and is preferably used in combination with .gtoreq.1 anionic surfactant to reduce its skin and eye irritancy.

IC ICM B01F017-46
ICS C11D001-645; A61K007-50; A01N025-30

CC 46-4 (Surface Active Agents and Detergents)
Section cross-reference(s): 19, 62

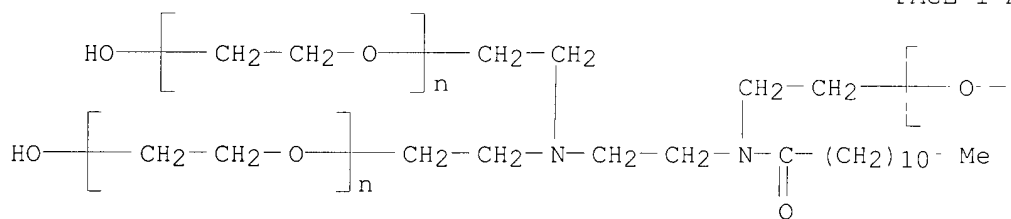
IT 101466-10-8P 186497-21-2P **186497-25-6P 186774-90-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and properties of)

IT **186497-25-6P 186774-90-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and properties of)

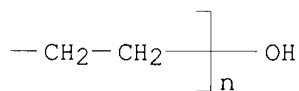
RN 186497-25-6 HCA

CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, ether with N-[2-[bis(2-hydroxyethyl)amino]ethyl]-N-(2-hydroxyethyl)dodecanamide (3:1) (9CI) (CA INDEX NAME)

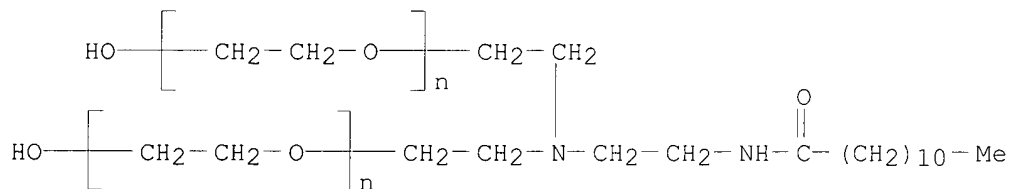
PAGE 1-A



PAGE 1-B



RN 186774-90-3 HCA
CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[[[2-[(1-oxododecyl)amino]ethyl]imino]di-2,1-ethanediyl]bis[.omega.-hydroxy- (9CI)
(CA INDEX NAME)



111:173107 Correction of: 106:49225 Improvement in the disintegration of steelmaking slag fertilizer granules. Oshikiri, Ryohei; Iwasaki, Tetsuharu (Sangyo Shinko Co., Ltd., Japan; Kao Corp.). Jpn. Kokai Tokkyo Koho JP 61040891 A2 19860227 Showa, 9 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1984-163566 19840803.

AB Comps. with one or more of SO₃H, OSO₃H, CO₂H, P(O)(OH), and P(O)(OH)₂ groups, or their water-sol. salts, are effective in improving the disintegration capacity in water of granular steelmaking slag fertilizers. Thus, rotary furnace slag was granulated with a compn. contg. molasses 3 and K dodecylbenzenesulfonate 0.075%. The granules (6 mo after prodn.) readily disintegrated in water by 100%, whereas the control (molasses only) disintegrated by <10% shortly after the prodn. and by 0% 6 mo. after the prodn.

IC ICM C05G003-00

ICI C05G003-00, C05D003-04

CC 19-6 (Fertilizers, Soils, and Plant Nutrition)

IT 139-96-8 151-21-3, biological studies 822-16-2 1639-66-3 1847-55-8 2235-54-3 9003-04-7 9004-82-4 9069-80-1 9080-79-9 9084-06-4 25155-30-0 26264-06-2 28519-02-0 29132-58-9 36473-73-1 37129-69-4D, styrene deriv. 51473-95-1 55078-28-9 65423-83-8 76376-03-9 86829-17-6 90751-52-3 103299-19-0 103299-20-3D, styrene deriv. 103334-14-1 103334-15-2 103334-16-3D, styrene deriv. 103334-17-4 103372-70-9 103372-76-5 103372-77-6 103515-06-6

RL: AGR (Agricultural use); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)

(disintegration capacity improvement by, of steelmaking slag fertilizer granules)

IT 103515-06-6

RL: AGR (Agricultural use); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)

(disintegration capacity improvement by, of steelmaking slag fertilizer granules)

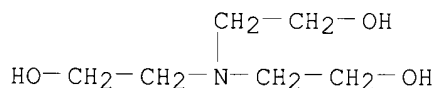
RN 103515-06-6 HCA

CN Ethanol, 2,2',2''-nitrilotris-, compd. with methyloxirane polymer with oxirane, mono-9-octadecenyl ether, (Z)-, phosphate (9CI) (CA INDEX NAME)

CM 1

CRN 102-71-6

CMF C6 H15 N O3



CM 2

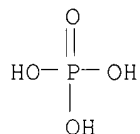
CRN 99638-72-9

CMF C18 H36 O . (C3 H6 O . C2 H4 O)x . x H3 O4 P

CM 3

CRN 7664-38-2

CMF H3 O4 P



CM 4

CRN 143-28-2

CMF C18 H36 O

Double bond geometry as shown.



CM 5

CRN 9003-11-6

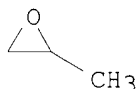
CMF (C3 H6 O . C2 H4 O)x

CCI PMS

CM 6

CRN 75-56-9

CMF C3 H6 O



CM 7

CRN 75-21-8

CMF C2 H4 O



L67 ANSWER 5 OF 6 HCA COPYRIGHT 2003 ACS

106:177839 Filled aqueous polymer dispersions for use as supports and adsorbents. Reischl, Artur; Mack, Kurt (Bayer A.-G. , Fed. Rep. Ger.). Ger. Offen. DE 3526184 A1 19870205, 21 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1985-3526184 19850723.

AB The title compns., useful as supports for fermn., wastewater treatment, or plant growth or absorbents for oil, are prepd. from aq. dispersions contg. 3-60% polymers, 20-90% H2O, and (based on solids) 5-97% filler (powd. foam or fossil lignocellulose carbon, and optionally living or dead cells). Mixing polyether-polyurethane foam particles 40, brown coal dust (particle size <100 .mu.) 50, cationic polymer latex 10 parts and 0.2 phr MgSO4 and coagulation at 90.degree. gave a compn. with bulk d. 73.5 g/L and H2O

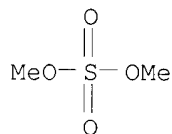
absorption 94.0%. The use of this compn. in biol. wastewater purifn. is exemplified.

- IC ICM C08J003-20
ICS C08J005-02; C08J009-00; C08K003-00; C08K005-00; C08K007-22;
B01J020-00; C09K003-00; C08L007-02; C08L075-04; C08L097-02;
C12N011-00
- CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 16, 19, 51, 60
- IT **99724-37-5 107951-44-0** 107951-46-2 107951-47-3,
Acrylonitrile-butadiene-sodium methacrylate copolymer 107951-48-4,
Acrylonitrile-sodium methacrylate-styrene copolymer 107951-49-5, Butyl
acrylate-sodium acrylate-vinyl acetate copolymer 107966-92-7,
Butadiene-sodium acrylate-styrene copolymer 108032-26-4
RL: USES (Uses)
(latexes, filled, for manuf. of absorbents and supports for biol.
processes)
- IT **99724-37-5 107951-44-0**
RL: USES (Uses)
(latexes, filled, for manuf. of absorbents and supports for biol.
processes)
- RN 99724-37-5 HCA
- CN Sulfuric acid, dimethyl ester, compd. with .alpha.,.alpha.'-1,4-
butanediylbis[.omega.-hydroxypoly[oxy(methyl-1,2-ethanediyl)]] polymer
with 1,3-diisocyanatomethylbenzene, 2,2'-(methylimino)bis[ethanol] and
methyloxirane polymer with oxirane ether with 2-ethyl-2-(hydroxymethyl)-
1,3-propanediol (3:1) (9CI) (CA INDEX NAME)

CM 1

CRN 77-78-1

CMF C2 H6 O4 S



CM 2

CRN 99143-27-8

CMF (C9 H6 N2 O2 . C6 H14 O3 . C5 H13 N O2 . 3 (C3 H6 O . C2 H4 O)x . (C3
H6 O)n (C3 H6 O)n C4 H10 O2)x

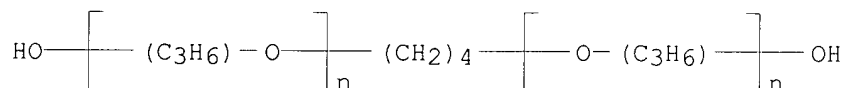
CCI PMS

CM 3

CRN 53609-72-6

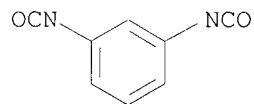
CMF (C3 H6 O)n (C3 H6 O)n C4 H10 O2

CCI IDS, PMS



CM 4

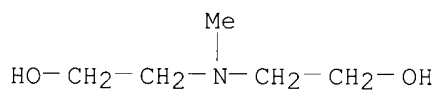
CRN 26471-62-5
CMF C9 H6 N2 O2
CCI IDS



D1-Me

CM 5

CRN 105-59-9
CMF C5 H13 N O2

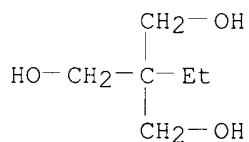


CM 6

CRN 52624-57-4
CMF C6 H14 O3 . 3 (C3 H6 O . C2 H4 O) x

CM 7

CRN 77-99-6
CMF C6 H14 O3

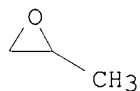


CM 8

CRN 9003-11-6
CMF (C3 H6 O . C2 H4 O) x
CCI PMS

CM 9

CRN 75-56-9
CMF C3 H6 O

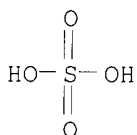


CM 10

CRN 75-21-8
CMF C2 H4 O

RN 107951-44-0 HCA
CN Ethanol, 2,2'-(methylimino)bis-, polymer with 1,3-diisocyanatomethylbenzene and methyloxirane polymer with oxirane ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), sulfate (9CI) (CA INDEX NAME)

CM 1

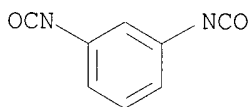
CRN 7664-93-9
CMF H2 O4 S

CM 2

CRN 99143-20-1
CMF (C9 H6 N2 O2 . C6 H14 O3 . C5 H13 N O2 . 3 (C3 H6 O . C2 H4 O)x)x
CCI PMS

CM 3

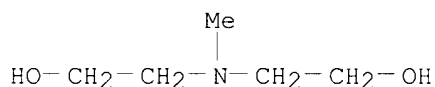
CRN 26471-62-5
CMF C9 H6 N2 O2
CCI IDS



Dl-Me

CM 4

CRN 105-59-9
CMF C5 H13 N O2



CM 5

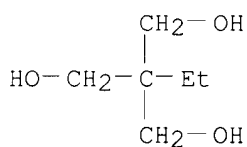
CRN 52624-57-4

CMF C6 H14 O3 . 3 (C3 H6 O . C2 H4 O)x

CM 6

CRN 77-99-6

CMF C6 H14 O3



CM 7

CRN 9003-11-6

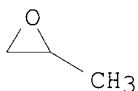
CMF (C3 H6 O . C2 H4 O)x

CCI PMS

CM 8

CRN 75-56-9

CMF C3 H6 O



CM 9

CRN 75-21-8

CMF C2 H4 O



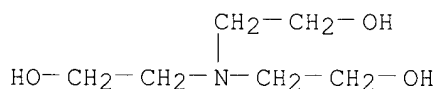
L67 ANSWER 6 OF 6 HCA COPYRIGHT 2003 ACS

106:49225 Improvement in the disintegration of steelmaking slag fertilizer granules. Oshikiri, Ryohei; Iwasaki, Tetsuharu (Sangyo Shinko Co., Ltd., Japan; Kao Corp.). Jpn. Kokai Tokkyo Koho JP 61040891 A2 19860227 Showa, 9 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1984-163566 19840803.

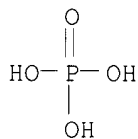
AB Comps. with one or more of SO₃H, OSO₃H, CO₂H, P(O)(OH), and P(O)(OH)₂ groups, or their water-sol. salts, are effective in improving the disintegration capacity in water of granular steelmaking slag fertilizers.

Thus, rotary furnace slag was granulated with a compn. contg. molasses 3 and K dodecylbenzenesulfonate 0.075%. The granules (6 mo after prodn.) readily disintegrated in water by 100%, whereas the control (molasses only) disintegrated by <10% shortly after the prodn. and by 0% 6 mo. after the prodn.

IC ICM C05G003-00
 ICI C05G003-00, C05D003-04
 CC **19-6** (Fertilizers, Soils, and Plant Nutrition)
 IT 55078-28-9 86829-17-6 90751-52-3 103372-70-9 103372-76-5
 103372-77-6 **103515-06-6**
 RL: AGR (Agricultural use); MOA (Modifier or additive use); BIOL
 (Biological study); USES (Uses)
 (disintegration capacity improvement by, of steelmaking slag fertilizer granules)
 IT **103515-06-6**
 RL: AGR (Agricultural use); MOA (Modifier or additive use); BIOL
 (Biological study); USES (Uses)
 (disintegration capacity improvement by, of steelmaking slag fertilizer granules)
 RN 103515-06-6 HCA
 CN Ethanol, 2,2',2''-nitrilotris-, compd. with methyloxirane polymer with oxirane, mono-9-octadecenyl ether, (Z)-, phosphate (9CI) (CA INDEX NAME)
 CM 1
 CRN 102-71-6
 CMF C6 H15 N O3

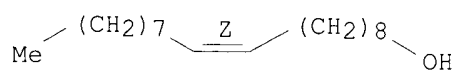


CM 2
 CRN 99638-72-9
 CMF C18 H36 O . (C3 H6 O . C2 H4 O)x . x H3 O4 P
 CM 3
 CRN 7664-38-2
 CMF H3 O4 P



CM 4
 CRN 143-28-2
 CMF C18 H36 O

Double bond geometry as shown.



CM 5

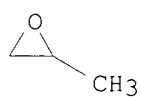
CRN 9003-11-6

CMF (C₃ H₆ O . C₂ H₄ O) x

CCI PMS

CM 6

CRN 75-56-9

CMF C₃ H₆ O

CM 7

CRN 75-21-8

CMF C₂ H₄ O